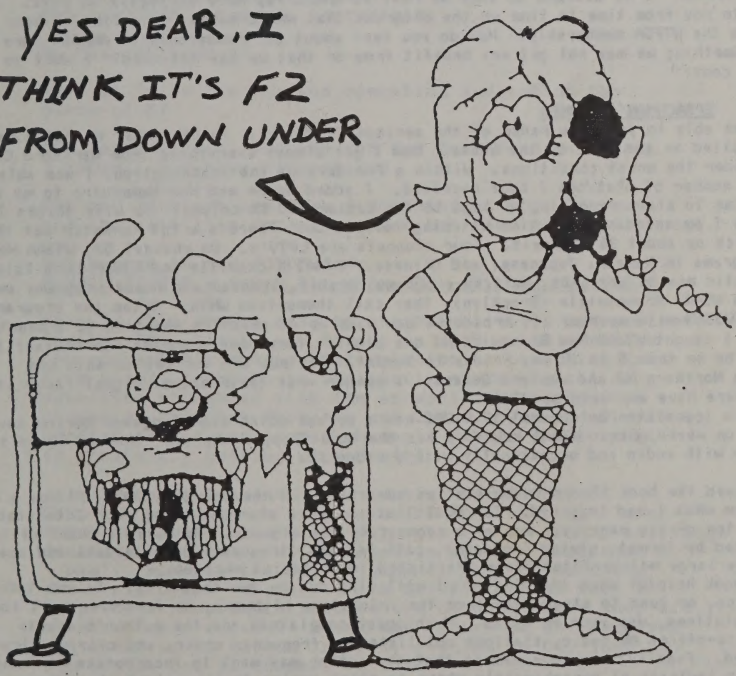
Vhf-Uhf DIGEST

The Official Publication of the Worldwide TV-FM DX Association

JANUARY 1992

MORE F2 ON TV!



ANARC UPDATE

WHAT'S GOING ON AT ANARC?

It's been over a year since I submitted my last ANARC UPDATE. Over that time it looked like ANARC had expired, only to be revived on a respirator. Work had been going on to rebuild the organization with very little enthusiasm generated. Several meetings were held at various non-ANARC DX related functions with few ANARC reps bothering to attend.

Then came the letter. In November I received a note in my mail that there was a certified letter at the Post Office. I figured either I won the Publishers Clearing House Sweepstake or the State of New York was laying me off due to Budget cuts. It turns out it was from Sheldon Harvey at ANARC. (I was hoping I had won the $7,000,000. Think of the great DX set up I could have purchased.) Sheldon starts off by complaining about the lack of enthusiasm among the clubs and their reps. At the last ANARC meeting held at the Monitoring Times Convention in North Carolina, only 4 clubs had reps (WTFDA not being one of them.). This was followed by demands. Some of the demands were reasonable. Others were a little harsh. Each club was expected to pay dues and give an annual donation based on the "benefits recieved from ANARC". Each club must run an ANARC club list in their bulletin, print the phrase "member of ANARC" on the bulletin and include ANARC information to all new members. Each club must designate a member to attend at least one ANARC meeting a year. There were 13 demands in all.

The letter brought an outcry from the clubs. An ultimatum was included- do this or get out. Most reps like myself are volunteers. We work, have time and financial constraints and family obligations. I know of no ANARC rep who is subsidized by their clubs. And what benefits have we received from ANARC over the last year? Have we gotten any new members through ANARC?

The internal politics of ANARC began to move after the letter was made public. The Executive Board ousted Sheldon and replaced him with Richard D'Angelo.

At this point in time I feel that WTFDA should remain a member of ANARC. Let's give it another year. Let's see what type of organization developes. And let's see what benefits we receive from ANARC. I've decided to take my roll as ANARC rep more seriously in 1992. I will report back to you from time to time on the progress that ANARC makes. I'd like to hear comments from the WTFDA membership. How do you feel about our membership in ANARC? Are we paying for something we may not get any benefit from or that we may not need? I want to hear the pros and cons!!

SPRACHMAN'S CORNER

I've been able to join the ranks of the serious TV DX'ers. In September we had a new antenna installed on the roof of the house. Now I get almost everything from Hartford CT to Trenton NJ under the worst conditions. Within a few days of the installation, I was able to increase the number of stations I have received. I added Maine and New Hampshire to my list of states. I plan to start reporting my logs to the Eastern TV DX column. My wife thinks I'm crazy because I am spending more time watching television. There's a lot to watch out there.

I now pick up about 30 channels. Four channels are LPTV's. On channel 53, W53AA New York features programs in Korean, Japanese, and Chinese. W44AI Hicksville and W38AM Long Island City have an eclectic mix of psychics, Haitien programs, Arabic, Iranian and Greek programs and music videos. With W54AY Brownsville (Brooklyn), they call themselves WNYX. Often the programming is different on W38AM with much of its broadcast day made up of psychics charging $2 a minute on a 900 number. I caught W36AS New Brunswick NJ one night. They have programs for (Asian) Indians. They seem to be on from 8 to 10 pm, Friday to Sunday. The ads are for restaurants and businesses in Northern NJ and Western Queens. I wonder what their actual signal range is? Anyone out there have any info on W36AS?

WPIX-11's translator on channel 17 W17AC has a person doing sign language during the 10 O'Clock news on weeknights. W60AI New York has the Home Shopping Spree. They do ID on the hour, usually with audio and occasionally with a video ID.

I purchased the book "Radio On Wheels" as advertised in the November VUD. It was a little different from what I had imagined. The book lists various stations along each Interstate highway. On top of the page is a map of a segment of the highway. Below is a chart of the stations listed by format, giving frequency, call letters, frequency of newscasts and special programs. The large metropolitan areas are listed in a special section.

Is the book helpful when travelling? I will find out on our next trip. If you take one or two short trips, or tend to stray away from the interstate highways, or you like small town low power radio stations, use your FM Atlas. My biggest complaints are the author's nearly automatic write-off of AM radio, stations not listed in frequency order, and city of license not being included. Finally, one improvement that the author may want to incorporate in future editions is to indicate at approximately where to start tuning to one set of stations, and where to tune out and try for the next set.

More in the future...

73's

Steven

Steven Sprachman
15 Berry Lane
Hicksville, NY 11801-6203.

SATELLITE NEWS

George W. Jensen
4604 Anntana Avenue
Baltimore, MD 21206-4220

Its that time of the month again. Changes still are coming hot and heavy. If I have erred in some items - PLEASE feel free to let me know.

Spacenet 4 is active with several items:
XPDR 6 - ID card
XPDR 18 - Delta Downs usually in MAC
XPDR 20 - LVTN - Las Vegas Television Network
this may be an eventual amalgam of The British Channel (whatever that is) - Outlaw Music Channel and others - but has been dark the last few days.
Still a few changes on C1
11 is now Encore with 1 vacant
4 is a sports channel in VC2
21 has been a full time NHK Tokyo feed from Japan

Many changes ongoing on what was F4 which is now replaced by Anik D2 with reversed polarity from F4
ValueVision is a new shopping service on one of the former Shop-At-Home transponders.
The improved signal is incredible!

G6 has replaced W4

Anik E1 is on the air and operating and taking the place of D2.

CNN International and the CNN New York feed on Galaxy 2 XPDRs 1 & 5 have disappeared.

The new Intelsat has been positioned at app. 24 west and the satellite formerly there has been moved elsewhere.

Now a note to the FORUM from
RONALD PERDUE - Route #1 - Box 224 - Byron, MN 55920

Here is this months news to the Satellite TV news column in the VUD. First, let me put in my 2 cents worth on the current scrambling proliferation on satellite. In five years, I expect to see nearly every channel on satellite scrambled with the exception of Religious channels, Shopping Networks and those so-called 30 minute program length commercial channels (where the consumer is constantly getting ripped-off).

It's December 1st and still no sign of the Sci-Fi Channel. I now have serious doubt that they will ever debut on satellite! Every day I have more than a skeptical feeling that the Sci-Fi Channel is nothing more than a "sham". Why has the Sci-Fi Channel kept on delaying their start-up? Why would the Sci-Fi Channel want to keep their proposed satellite and channel where they are to start up a secret? Every day I turn on the receiver and check up on Satcom 1R or 4, even on to C1, just to see if the Sci-Fi Channel is there, but it's not.

I have written to the Satellite Source and to the National Programming Service about 3½ weeks ago to inquire about programming prices but I have never received a reply! I will write again today and hopefully will hear from them. So - see you in 30 - 73's

That's all from this end - see you in 30.

George

TeleVision News

Doug Smith, Editor
14 Brookside Court
Nashville, TN 37209-4503
(615) 356-8305
CIS 72777,3143
W9WI ● W4HHY.TN

ABBREVIATIONS USED IN THIS COLUMN:

ERP= Effective Radiated Power, in kW
HAAT=Height Above Average Terrain, in meters
nc= No change
TL= Transmitter Location
CP= Construction permit
MP= Modification permit (modification of construction permit)
*= Non-commercial

APPLICATIONS TO CHANGE EXISTING STATIONS

St	Ch	ERP	HAAT	Call	City
CA	29	16.2	334	KZJA	Eureka
MS	51	1494	379	WPJJ	Jackson
OH	43	204	264	WUAB	Lorain
		(I suspect this ERP is a typo)			
OK	44	578	164	KGLB-TV	Okmulgee
		(TL 35°43'25"N, 95°59'20"W)			
PR	18	500	563	WSJU	San Juan
SC	43	1020	316	WGSE	Myrtle Beach
		(Reference says 1.02kW)			
TX	22	nc	566	KLTJ	Galveston
		(TL coordinates not given, but description is Senior Rd. tower farm, where most Houston stations are)			

CHANGES GRANTED TO EXISTING STATIONS

St	Ch	ERP	HAAT	Call	City
IN	69	10.5	167	WTBU	Indianapolis
		(TL 39°50'37"N, 86°10'19"W)			
MD	13	215	267	WJZ-TV	Baltimore
		(TL 39°20'05"N, 76°39'03"W)			
MS	29	923	598	WMPN-TV	Jackson
		(TL 32°12'46"N, 90°22'54"W)			
NY	7	316	221	WWNY-TV	Carthage
		(TL 43°57'12"N, 75°43'43"W)			
TN	16	nc	322	WMTU	Jackson

CHANGES IN THE TABLE OF ALLOCATIONS

Ch	Was	Now
12	Ardmore, OK	Sherman, TX
	(Requested by KXII-12)	

NEW STATIONS ON THE AIR

XHJUB: Ciudad Juarez, Chih.:56:
Don't have a lot of details on this one.

KJLF: El Paso, TX: 65:
Or on this one either.

FORUM

Anyone know anything about a religious LPTV/translator on channel 6 in Chattanooga? I've heard it twice now on the car radio driving through. Modulation sounds about the same as WUTC-88.1, which makes me think this is a pirate FM station rather than a (legal) LPTV. Will have to remember to bring the pocket TV next time..

Another mystery contributor!
"RC", El Paso, TX:
passed along the news of two new locals in his area, shown above. While on the subject of El Paso, I forget whether this was ever cleared up, but KSCE-38 there is definitely a religious station and not PBS.

Bill Nienajadly, Clifton, NJ:
sent an AP article from the *NYC Daily News*;

"Japan began the world's first full-scale high-definition TV broadcasting yesterday; HDTV sets have been on sale for a year here, but only about 200 reportedly have been sold, mostly to businesses."

Apparently HDTV receivers retail for $35,000, and HDTV VCRs for $154,000, which probably explains the poor sales! Electronics manufacturers hope to bring the receiver cost down to the vicinity of $7,500 within 5 years- still kinda steep for my blood..

Japanese promoters of HDTV had seen a $15.4 billion market in Japan by the year 2000, but now are admitting those were optomistic estimates.

The Japanese HDTV broadcasts are via DBS broadcast satellite.

Matthew Keaper, St. Francis, WI:
Wrote asking about reference books to look up DX stations outside his local area.

I've seen frequent references to the WTFDA's North American TV Database; this hasn't been available since I joined about 2 years ago, so I don't have one! (anyone interested in selling one?!)

The reference I use is the *Television Factbook*. This is published in two volumes & intended for use by TV stations. It's

extremely expensive (I don't know how expensive- I got my used copy from a coworker at WISC-TV!) Each commercial TV station gets a page, with channel, network, visual & aural powers, antenna height data, mailing address, and a whole bunch of other information. Also included is a coverage map showing the grade A and B contours. Non-commercial and Canadian stations don't get the coverage maps, but most of the rest of the data is there.

Another good reference is the *Broadcasting Yearbook*. It's lacking the maps, the print is somewhat smaller, and it seems to be a little less accurate, but if you DX AM and/or FM, it also includes radio stations. This is also extremely expensive-- the 1992 issue is $160!

Obviously, you have to be awfully serious about DXing to spend over $100 on one of these references! Luckily, there are other ways to get them...

If you know someone at a TV or radio station, you might ask whether they have any old copies they're willing to give away or sell cheap. That's how I got mine..

The *Factbook* comes in two volumes; one mostly TV stations (the one you want) and the other mostly services, including cable. The volumes are sold as a set. It's quite possible that your local cable system has a copy of the "Stations" volume they have no use for & would be willing to get rid of.

Finally, many public libraries have reasonably recent copies of both of these publications.

FCC RULES PRIMER

is on hold until next month.. the Christmas rush, y'know..

A belated Merry Christmas & Happy New Year to all WTFDA members & their loved ones. Especially to Bill Fahber, whose continuing research is responsible for most of the quality of this column. 1992 promises to be a good year for DXing; hopefully it'll be a good one in your personal lives as well. My first New Years Resolution: to actually make it to the convention this year!

News has been a little (OK, a lot..) slow this month.. Contributions, questions, information, musings, etc. are all always welcome!

73 Doug 73

(apologies for the ugly logo - couldn't get it photoreduced in time!

STATION BREAK

WTFDA Stationbreak
P.O. Box 514
Buffalo, NY 14205-0514

WTFDA member ads only. Items may be edited to conserve space.

FOR SALE - RDX Labs UA-75 UHF balun, 0.1 dB loss, $19. UA-60 VHF-UHF balun, 0.3 dB loss, $19. UA-900 UHF amp, built-in balun, 1.0 dB NF, 20 dB gain, $169. UA-700 VHF high-band amp, built-in balun, ch 7-13 BPF, 1.5 dB NF, 20 dB gain, $149. All prices FOB KS. For complete data and ordering information, send large SASE.
Jim Dietrich - P.O. Box 88 - Derby KS 67037

FOR SALE - RG-11U Commscope cable $0.30 per foot + UPS; F-11 connectors 2/$1.50 + UPS; P-5 UHF parabolic dish $59.95 + UPS; P-7 UHF parabolic UHF dish $79.95 + UPS; MXU-59 100" corner reflector UHF yagi $50.00 + UPS. Last call for these Winegard amplifiers: CP-4800 UHF 19 dB gain/2.1 dB noise - $75.00 + UPS; AC-4990 UHF 21 dB gain/1.2 dB noise - $95.00 + UPS; CP-3800 VHF 28 dB gain/3.0 dB noise - $75.00 + UPS. Also any Winegard, Antennacraft, ChannelMaster. Blonder-Tongue equipment. Certified check or money orders only.
Rich Wertman - 6150 Crosby Road - Lockport NY 14094 (716) 433-0805

YOUR non-commercial ad can appear in the VUD free of charge! Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION BREAK. This feature appears on a space available basis. WTFDA and the VHF-UHF DIGEST assume no responsibility for any claims made by advertisers--our trust is implicit, as fellow DXers.

FM NEWS

Bruce F. Elving, Ph.D., Editor
Box 336
Esko MN 55733-0336, U.S.A.

Contributions earnestly solicited!

Readers' Reports

Bob Baker sent a long review of the Day-Sequerra FM reference tuner published in the Dec. '91 "Stereophile." The thing that sets this review apart from others is that the author, Larry Greenhill, is a ham. He mentions using the tuner for DXing and he does some side-by-side comparing of it to such tuners as the Magnum/Dynalab "Etude." Both seemed to perform about the same, incidentally, but the Etude is much less expensive; the Day-Sequerra lists at $4800, or $12,800 with an optional "FM Reference Panalyzer," which I gather is an oscilloscope-type display. Bob emphasized in the article that "connectors and coaxial cables in any home tuner installation [should be] in superb shape. Poor antenna feeds can completely defeat a powerful rooftop antenna and a top FM tuner with a supersensitive RF section." The review failed to mention how immune that tuner might be to overload from strong local stations, but it did credit the "FM Atlas" as "handy" for showing the stations.

Bill Nienajadly sent word that WZZV 95.7 Olyphant PA is on the air, op, but not known if stereo. Similarly, WDNO 95.3 Laurel DE is on with stereo and "varied lame format." Lame "denotes soft rock/AC stations with overplayed selections and poor presentations. I personally have not been using that term for a while, but others are using it more and more. I'm off the hook on that one! . . . What is your opinion of the 110 kHz filters?" [So far I have only tried one in a G-E Superadio, and could not tell if there was improvement or not; stations are not as close to each other here in the Midwest as they are in the N.E.—b.e.] Andy Bolin sent Bill a seven-page write-up on his phase box, which he sells for $145. "I must say that price seems kind of expensive, but he does have a money back guarantee on it, so I just might go for it." A teenager in Trenton NJ reports being bothered by radio playing through his braces; Bill speculates it might be WKXW 101.5. Other questions about stations having stereo or not—WRAV 94.5 Ravena NY, WKBE 100.5 Warrensburg NY, WTTH 96.1 Margate City NJ? Gerry Turro's Pomona NY 94.3 translator now has WBAB 102.3 Babylon NY, no longer Z-100. Rich Shafton visited Bill and had 110 kHz filters installed in his JVC receiver, GE Superadio and Pioneer Supertuner III car radio. "He didn't notice any deterioration of sound quality and overall selectivity is much better. . . He had 150s in all the units before. He said he had the Philly adjacents driving in the Bronx!"

WRJT Monterey TN now on 106.9, reports Doug Smith, and he says WUTC *88.1 Chattanooga does some of its own programming—not always relaying in stereo the signal of WUOT *91.9 Knoxville. He tried but failed to log Bahamas 104.5 on a recent trip because of FL stations on 104.3 and 104.7. "Heard KA2XXE 107.9 Columbia. Mono, pretty good signal for a considerable stretch of I-75. Columbia isn't on most maps; I thought it was down by Orlando, but your map in the Atlas showed it wasn't as good DX as I thought!"

Harry Helms says he doubts there will be a fourth edition of the book he has done with Hank Bennett, "The Complete Shortwave Listener's Handbook." I wrote him because I wanted my chapter revised if a new edition should be published. "Congratulations on the success of your 'FM Atlas'! Much deserved!" he writes.

Bruce Hall: "Pleasure to meet you for the first time at Dunkirk for the convention. Have enjoyed my little Cool Cube radio with SCS. I use it at work while at my desk. My car radio is certainly a lot sharper after Bill Nienajadly transplanted the 150 filter, although I primarily DX at home." He sent an article on a tourist attraction in Brantford ON, Icomm, which is on a fundraiser to furnish and equip with interactive displays—a "science centre, demonstrating the impact of communications and information technology on our daily lives."

Now, until I get a chance to analyze more data that have poured in, this is it until next month. Look below for "See Also," culled from December's VUD.

See Also December VUD For

IN Austin WJAA 96.3 $tereo, ID with Seymour, Strobel, p. 13
NY Alfred WETD *90.9 now $tereo; s, Nieman, p. 12
NY Buffalo WGRF 96.9 still "Rock 97," but I list "97 Rock" (not "Rock 97") as the nonID for WRRK Braddock PA, "Station News," p. 10
WUFX 103.3 rp, "Station News," p. 11
NY Loudonville WVCR *88.3 $tereo (back to; was mono for a long time), p, Nieman, p. 12
OH Ada WONB *94.9 $, op, "Rock 95," Strobel, p. 13
OK Moore KMSI *88.1 ID with Oklahoma City, Buntin, p. 15; also it has $[tereo]
TX Robstown KLUX *89.5 list as b, Strobel, p. 13
TV character generators for identifying translators (p. 27, Smith). I'd like to find out how a DXer might acquire the decoder to tune in those elusive IDs; I understand some FM translators are also thusly identified. Any hints about building or buying such units to sleuth out the translator IDs?

Format Changes

Formats are the same as in the "FM Atlas"

AL Northport WLXY 100.7 rm
AL Ozark WOLS 103.9 rm
AR Mountain Home KKTZ 107.5 o
AR Stamps KZHE 100.5 k, getting an extension of time to move from 100.1
AR Walnut Ridge KRLW-FM 106.3 k
CA Fresno KSKS 93.7 k, "Kiss Country"
CA Imperial KBCD 99.3 Spanish, l
CA Mendocino KMFB 92.7 o
CA Ontario KRZE-FM 93.5 e, loses stereo, parallel to KFOX 93.5 Redondo Beach
CA San Luis Obispo KZOZ 93.3 p, but the market "might be considered the lame radio capital of the West. Stations at 98.1, 99.7, 101.3 and 107.3 fall into this category."
CA Tracy KSGO 100.9 o [no stereo
CO Castle Rock KYBG-FM 92.1 nt, news/sports, /
CO Snowmass Village KSNO-FM 103.9 r, same as on KKYY 98.3 Gunnison and KIDN-FM 95.9 Hayden
FL Key West WKRY 93.5 rp
FL Ocala WMFQ 92.9 mr
FL Pompano Beach WMXJ 102.7 o
FL Starke WEAG-FM 106.3 rm
GA Cairo WSLE 102.3 rm, "Whistle"
GA Dock Junction WXMK 105.9 r, CHR
GA Hinesville WSKX 92.3 s, $, "92 Jams" (from "92 Kicks")
GA Macon WAYS 99.1 o, still "99 Ways"

GA Milledgeville WLRR 100.7 r, $, no "Light Rock" (is AC/oldies)
GA Springfield WQQT 103.9 k
HI Honolulu KHFX 105.1 o, entering a time sales LMA with KQMQ-FM 93.1 and AM and KPOI 97.5, under the umbrella, "Radio Marketing Associates"
ID Caldwell KBXL 94.1 mr, "X-94"
ID New Plymouth KZMG 93.1 r, still "Magic 93"
ID Payette KQXR 100.3 r, "Power 100" (from "Q-100")
IL Harrisburg WOOZ 99.9 o, ID with Carbondale
IN Austin WJAA 96.3 r
IN Indianapolis WHHH 96.3 r, "Hoosier Hot 96"
IN Rensselaer WLQI 97.7 r, "Q-98"
KS Baxter Springs KMOQ 107.1 o, "Oldies 107," ID with Pittsburg
KY Greenville WWHK 105.5 rp
KY Irvine WCYO 106.1 k
KY Vanceburg WKKS-FM 104.9 k
KY Wickliffe WGKY 95.9 op, SMN classic rock
LA New Orleans WRNO-FM 99.5 still p, but dropping Z-Rock days. "Perhaps the arrival of WZRH 106.1 has something to do with the change. I've been told by someone who claims to know the owner personally that WRNO-FM has been up for sale (so has the short wave)."
ME Dexter WGUY 102.1 o
ME Madison WHAA 97.5 o
MD Federalsburg WQMR 107.1 r, "Power 107"
MA Harwich Port WFXR 93.5 rm
MA Hyannis WCOD 106.1 rm, "Gold/AC"
MA West Yarmouth WXTK nt, monophonic, remove $ listing
MI Cadillac WCKC 107.1 k, "KC Country," ID with Traverse City. Programmed and identified with WMKC 102.9 St. Ignace MI.
MI Hart WCXT 105.3 rm
MI Tuscola WGMZ 101.7 k, local marketing agreement (LMA) with WKMF 1470 AM Flint
MN Fergus Falls KJJK-FM 96.5 rm
MN Grand Rapids KMFY 96.9 rm
MN Park Rapids KDKK 97.5 o, uses calls, not "StarStation 97½"
MN Thief River Falls KSRQ *90.1 rp
MS Ellisville WJKX 102.5 o, joint programming with WKNZ 101.7 Collins
MO Savannah KSJQ 92.7 k
MO Warrenton KFAV 99.9 r, "V-100"
MT Livingston KYBS 97.5 k
NE Lincoln KFMQ-FM 101.9 rp. KLMS AM 1480 now KFMQ (AM) and simulcasting. KMXA 106.3 b, $, "The New Mix 106." For "a day and a half 'The Blaze' with heavy metal, then b. What a surprise!"
NE McCook KZMC 105.3 rp
NE York KTMX 104.9 rm
NH Lisbon WLTN-FM 96.7 o
NM Alamogordo KZZX 105.3 k, moving from 105.5
NM Hobbs KZOR 94.1 rm
NM Los Lunas KZPY 106.3 kr
NY Cobleskill WSHQ 103.5 rm
NY Dansville WACZ 93.9 rm
NY Hudson Falls WENU 101.7 mr
NY New Rochelle WRTN 93.5 mp, with "heavy metal" Saturday nights and Sunday mornings; also Spanish late weekend nights
NY Peru WXLU *88.3 cn, $
NC Clinton WMXS 107.1 sr
NC Goldsboro WEQR 102.3 rm
NC Louisburg WHLQ 102.5 k
ND Fargo KFGO-FM 101.9 k, "New Country 102" (strict), with official ID at :55 ("Magic 102" rubbed out)
OH Bowling Green WRQN 93.5 o, "Oldies 93.5"
OH Canton WHBC-FM 94.1 o
OH Columbus WBNS-FM 97.1 o, "Oldies 97.1"
OH Geneva WDON 104.9 o
OH Oberlin WOBC *91.5 rp
OK Oklahoma City KKNG 92.5 rm
OK Weatherford KWEY k-FM 97.3 k, "Y-97"
OR Hermiston KQFM 99.3 rm
OR Hood River KCGB 105.5 r, SMN
PA Danville WPGM-FM *96.7 g, not gr
PA Harrisburg WIMX-FM 99.3 o, now simulcast by AM
PA Jersey Shore WRKK 97.7 op, no "Hot FM," now saying "Rock 97-7" with calls
PA Lancaster WNCE 101.3 mr
PA Millersville WIXQ *91.7 p, $, but temporarily off the air due to Student Center renovations. It "was cheated out of a large chunk of its eastern York and northern Lancaster County listenership. The station that caused this interference: WJAZ *91.7 Summerdale/Harrisburg. I find it hard to believe WJAZ is operating with only 250 watts. Their signal is incredible! I could get them in my car as far away as Shippensburg to the west. And when WIXQ is off the air I could get them fairly strong in the parking lot of the Student Center at Millersville University. . . It seems ludicrous why someone chose to put those stations on these frequencies. . . Were these stations victims of bad frequency searches or is there something here I don't understand?" [Also mentioned: WDCV *88.3 Carlisle being cheated out of its Harrisburg area listeners because of WWEC *88.3 Elizabethtown.]
PA Renovo WMHU 93.1 r, "WKHL," but now silent.
PA Saltadasburg WKHL-FM 95.5 (and AM 1190 in Hughesville) most recently r, and dropping "Kool Radio," but now silent. "Radio must be in a parlous state in our area."
PA Starview WHTF 92.7 op, ID with York-Lancaster (not with Harrisburg), "Starview 92.7"
SC Moncks Corner WJYQ 105.5 rm, "My 105" (loses "Joy 105.5 FM")
SD Redfield KQKD-FM 103.7 kr, $
TN Centerville WNKX-FM 96.7 k, "Kicks 96.7"
TN Memphis WYPL *89.3 t, reading to the blind, fulltime, main carrier, no SCS. This station replaces WLYX which deletes. WYPL plans stereo, but it may be pseudo-stereo, since no music is broadcast.
TX Corpus Christi KMXR 93.9 r
TX Edinburg KBFM 104.1 rs, "Hot B-104" (from "B-104")
TX Kilgore KKTX-FM 96.1 op
TX Killeen KBTS 93.3 sr, "B-93 Jamz"
TX Lubbock KKIK 93.7 g, LMA with noncommercial KAMY *90.1
TX Mount Pleasant KPXI 100.7 k, "K-100" (from "X-101"). "Sixth format this year (AC, AOR, top 40-rock, top 40, AC, country!)" [still "Magic 105"
TX Robstown KMIQ 105.1 sr, no Spanish,/
TX San Antonio KISS-FM 99.5 and AM still o, but entering an LMA with KSMG 105.3, "Magic 105," o, Seguin-San Antonio. Look for a common positioning statement to emerge. [uses calls, "KXOX 96.7"
TX Sweetwater KXOX-FM 96.7 o, SMN Kool,/
VA Farmville WFLO-FM 95.7 rm
VA Harrisonburg WMRA *90.7 cj
VA Radford WRIQ 101.7 k, "Q-102"
VA Rural Retreat WCRR-FM 95.3 rm
VA Suffolk WFOG 92.9 mr
WA Everett KSER *90.7 pt, "always stereo. . . was only mono once or twice while getting the bugs out of their new transmitter."
WA Seattle KNDD 107.7 rp, "107.7 The End" (strict). "Just the station Seattle's been waiting for. It's different from any other station. I'm sure glad they dropped their AC format, as there are too many in Seattle."
WV Milton WAEZ 106.3 o, SMN Pure
WI Green Bay WPNE-FM *89.3 cj, $ WGBW *91.5 tj
WI Menomonie WVSS *90.7 cj, $
WI Plymouth WXER 104.5 rm, "Extra EZ Rock" [98, WAQE," no "98-Q"
WI Rice Lake WAQE 97.7 rm, uses calls, "Great/
WI Watertown WJJO 94.1 rp, "New tower, Deerfield WI, basically calls itself a Madison station—ignoring Watertown."

On Air (Selected)

LA Jennings KJEF-FM 92.9 C2, from 92.7A
MI Bloomfield Hills WBFH *88.1, now on with 360 h,v; 55 m, d-a, "with decent stereo"

Off Air—Or Not Yet On

CA Grover City KWCD 107.3
FL Beverly Hills WPDS 97.1
FL Newberry WNFQ 100.5
GA Omega WQBX 107.5
IL Kankakee WTKC *91.1
IN Bloomfield WBHQ 101.1
IN Clinton WPNL *93.9
IN Elletsville WZYG 105.1
IN Knox WUVX *89.3
IN Salem WDHM 97.9
IN West Lafayette WBAA-FM 101.3
IN Winamac WOTD 100.1
LA Folsom KGZC 104.9
MI Novi WOVI *89.5
MI Oak Park WOPR *90.3
OH Lorain WNZN *89.1
PA McConnelsburg WEMX 103.7
PA Sharpsville WAXF 95.9
TN Manchester WFTZ 101.5 [to 94.9
TX Canadian KRBG 103.1, preparing to move/
VA Culeper WPVB *89.9
VA Hot Springs WBHA 107.1
VA Waynesboro WPVA *90.1
WV Phillipi WQAB *91.3
WV Pocatalico WTUN 98.7
WV White Sulphur Springs WXMD 93.3
WI Brillion WEZR 107.5
WI Brookfield WRIT 106.9
WI Lomira WFDL 106.7
WI Mayville WMVM 98.7
WI Mishicot WTRW-FM 94.7
WI New Holstein KFKQ 93.1
WI Tomah WBOG 96.1

Deletions

AL Huntsville W292CD 106.3, per station request [WLXY 100.7 Northport
AL Tuscaloosa W261AD 100.1, because of new/
AK Bethel KBTB 98.3
AR Marianna KVNZ 106.9, an unbuilt CP
GA Sparta WHAN 102.7, an unbuilt CP
IL Oregon WLFW 106.1, CP forfeited
KS Downs KWNL 94.1
MI Hancock WTHV 98.7, CP forfeited
MN Roseau KRMB 102.1, CP forfeited
ND Wishek KMVC 100.3, CP forfeited
OK Lahoma KGPD 95.7, an unbuilt CP
PA Camp Hill W285AF 104.9—was once licensed
PA Carlisle W220AH *91.9, displaced by WJAZ
PA Harrisburg W211AA *90.1
PA Millersburg W215AA *90.9
TN Memphis WLYX *89.3—equipment given to WYPL 89.3
UT Richfield KYAY 97.5
VA Lawrenceville WHFD *91.7
WI Sturtevant WZXA 104.7
PQ Kawachikamach CFNM 89.3
"I'll be traveling soon and send you any info I hear along the way. Love the Atlas and FMedia!"

SCServices, 67, 92, 102.271 kHz

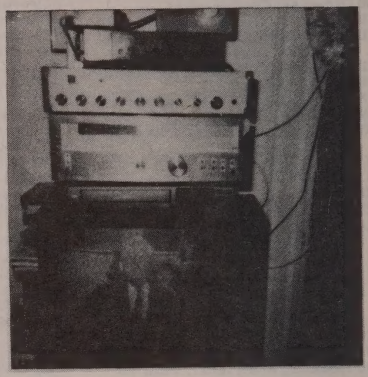
Symbols are as in the "FM Atlas"

AR Conway KMJX 105.1 no †Y, 92
CA Pasadena KPCC *89.3 †E, 67, RSI, Radio Sedaye Iran; Filipino 92
CA San Diego KSDS *88.3 no †Y, 92
KCBQ-FM 105.3 †E, 67, Farsi (RSI)
CA San Francisco: "We are on SCS [KALW *91.7], but would like to buy an FM station. What do they cost? . . . With FM stations so expensive, what about AM?" I suggested he consider running an AM station along with an existing SCS. That way, current listeners wouldn't be alienated and the SCS could fill in coverage gaps if a lower-powered AM were acquired, which might go directional or reduce power at night.]

PHOTO-NEWS
JANUARY 1992

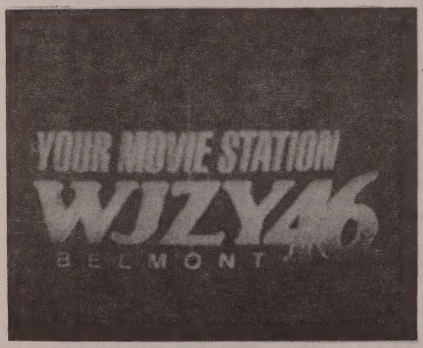
MAILING ADDRESS:
PHOTO-NEWS
12284 NICE ROAD
AKRON NY 14001-9529

Bill Nienajadly - Clifton, New Jersey is are first reporter for 1992. Bill sent in a foto of his DX set-up. From top to bottom; on left is his Winegard AC-4990 power supply. next to that is a Radio Shack rotor control. Next is a Teknika TVC22 TV tuner. Below that a Fanon PRO 120 public address audio amp for his Pioneer TX-9800 FM tuner Bill modified with (2) 180khz & (3) 150khz IF filters. For recording his TV DX he has a Emerson VCR model 765. All this is setting on a Samsung color TV; on screen is "channel 22 from Annapolis MD under normal troposcatter conditions at 189 miles! My farthest viewable TV station under near dead conditions!" Not seen; Radio Shack U-120 UHF antenna and one of their 6 element FM antennae + 10db postamp.

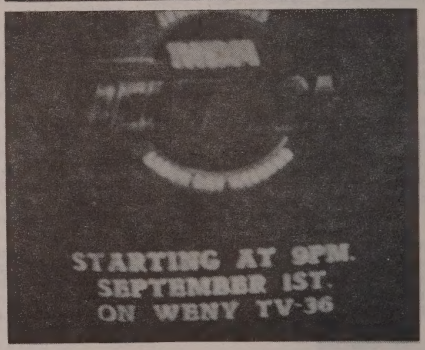


Just a short drive down the Garden State Parkway is Joe Fela's South Plainfield, NJ home, yes the one with the Antennacraft P-7 dish & Winegard PA-4975 preamp on the roof. That must be Joe at the controls of his G.E. color monitor. As he goes thru the channels we can see:

WCNC-36
Charlotte North Carolina
516 mile tropo
seen August 26 1991
at 0558 EDT



WJZY-46
Belmont North Carolina
515 mile tropo
seen August 26 1991
at 0559 EDT



WENY-36
Elmira New York
157 mile tropo
seen August 27 1991
at 0715 EDT
"not long, but this one doesn't make it down here too often via true tropo"

DAVE

EASTERN TV·DX

Bill Nienajadly
PO Box 2999
Clifton NJ 07015-2999
1-201-478-3044

JANUARY 1992 — 3 Month log cutoff — deadline 2/5/92

Happy Nue Yeer everyone! Lets look forward to 1992 with hope of much DX and other **goodies.** In the meantime, this column is still dealing with 1991 and there is DX to report out there ...where? How about December E-skip! As Im typing up this column on 12/6/91 I have heard about super bang up opening late November & on Dec 1st. Hopefully we'll get some reports on those dates which I heard happened in the South with a MUF at 108+. In the Northeast there was one opening on Dec 2nd with a MUF of ch 6+. Rich Shaftan of NJ logged ch 2 Denton TX on 12/2.

Jeff Falconer Box 63 Clinton ON N0M 1L0 — Icom R7000, 25 el log periodic @ 25 ft with rotor — ALL TROPO LOGGINGS

8/25 0428 WBNS 10 OH 263
0429 WEHS 60 IL 334
0433 WVTV 18 WI 324
0436 WHME 46 IN 275
0452 WHMB 40 IN 353
0457 CIII-27 ON 166
0501 WKOI 43 IN 326

8/25 0521 WGN 9 IL 333
8/30 0116 WANE 15 IN 256
8/31 0211 W15AM MI 214
// to WHME-46
0213 WVTV 18 WI 324
0215 WNDU 16 IN 277
0225 WDJT 58 WI 324

11/17 1200 WXIN 59 IN 353
1201 WHME 46 IN 275
1203 WGBA 26 WI 327
1223 WFWA 39 IN 256
1225 WPTA 21 IN 256
1229 WANE 15 IN 256

11/17 1230 WHMB 40 IN 353
OVER Local CBLN
1231 WSJV 28 IN 276
1254 WLFI 18 IN 344
1258 WOSU 34 OH 249
1300 WFYI 20 IN 352

An above average Tr opening for November and that's been it. Only one new TV logging via ES this season! 73, Jeff

Ed Phelps Rt 2 Box 266 Benton KY — ALL TROPO LOGGINGS — (Phoned into ETVDX-BN)

11/22 WAIQ 26 AL 330 WBIQ 10 AL 248 WCIQ 7 AL 273 WGIQ 43 AL 390 WALB 10 GA 458- all in evening via tropo

Also Atlanta, Huntsville, Birmingham — Total Stations 444

(Editor corrections, WPSD is on ch 6 not channel FIVE, as I stated last month. Sorry about that -BN)

Tom Bryant 849 Todd Preis Dr Nashville TN 37221

ALL TROPO IN NOVEMBER 1991

13 0026 WCIU 26 IL 405
WFLD 32 IL 407
0027 WSNS 44 IL 407

13 0030 WYCC 20 IL 407
0041 WPWR 50 IL 405
14 0059 W29AD AL 173

14 WBRC xltr Anniston
1841 WIIQ 41 AL 259
2322 WXXV 25 MS 385

22 2354 WHOA 32 AL 255
23 0101 WCOV 20 AL 257
23 0133 WELF 23 GA 155 TENT

The only relogs are stuff that I don't normally get: for example, the 3 repeats from Chicago on 11/13. That was an unusual duct with no other IL, WI, or Northern IN activity. At the same time, almost all Northern AL, MS and GA reg-ulars were good to s/f. (Selective ducting-BN). The new P-5 parabolic continues to turn in exceptional performance. Hope 1992 is a Happy DX New Year for all WTFDA'ers! Tom (Tom did a great job with the WTFDA Convention Video tape-BN)

Jeff Wolf 1131 University Blvd. W Apt 701 Silver Spring MD 20902

Dayton 12" B & W , UHF- Radio Shack 4 Bay, twin lead bowtie, 15-1104 VHF UHF amp (used for UHF only) VHF: Radio Shack rabbit ears 15-235 all directions/ VHF channels, Building's VHF antenna North East direction only, for channels 2,3,4,5,8,9,10,11,13

Eric Voytko wrote that the UNID-2 I saw on 8/11/91 could possibly be KTVI. Thanks Eric,

8/1 Tr 2010 WSET 13 VA
8/5 Tr 0751 WQEX 16 PA
8/7 Tr 0028 W48AA WV
0117-0300 NC 16
WYED-17,22,40, 13+
VA WSET-13,29
GW 0743 WDCA 20 off until 1905
Tr 0746 SC 15 gd-vgd
NC 11,22
0800 UNID 20

8/7 0810 to 0929 SC 19
Charlotte 18,36,46
Tr 1000 WJPR 21 VA
8/15 Tr 1016+WQEX 16 NC
8/17 TR 0659 RI 64 ?
WLIG 55, NC 45
NYC 41, CT 53?, 30
8/22 Tr 0949 UNID 17z
10/1 GW 1905 WYVN 60 WV
Martinsburg Fox 1st day on the air

10/1 Tr 1946 CCI O/WV60
10/19 Tr 0208 NC 16-s/off
0238 NC 28-s/off
0300 NC 40-s/off
0327 NC 40 3/4 cb
0613 WPDE 15 SC
0828 W40AH VA (ACTS)
0916 WUNJ 39 NC
10/24 Tr0538 WPDE 15 SC
10/25 Tr 0559 WRDC 28 NC

10/25 Tr 0559 New calls was WPTF now it is WRDC
11/6 ES 2200 KJRH 2 OK MUF 3
11/8 AU 1840-1930 ch 2 cci
11/21 ES 2208 2+,z
11/29 ES 1920 2z, - +
12/2 ES 1800 KOET 3 OK
KFDX 3 TX
1830 KBTX 3 TX

William R. Hepburn 35 Lockwood Rd Brampton ON L6Y 4T7 -JVC HR-D630U VCR w/indoor VHF dipole & UHF 4-bay

ALL TROPO LOGGINGS

Oct 91

18 2315 CBOT5 33 ON 148
McArthur Mills
w/CBC Ottawa
28 2334 WNDU 16 IN 355 $

Nov 91

17 2228 WCMU 14 MI 250
Mt Pleasant
2236 WSMH 66 MI 205
Flint-Saginaw
Bay City s/off 0105

17 2347 CKCO4 11 ON 119
Muskoka-Haliburton
video only u/CHCH
//CKCO 13

18 0040 WXMI 17 MI 295
Grand Rapids
s/off 0203
1000 CJOH 13(PQ) 225
Ottawa ON-Hull u/CKCO

Dude from Joisey PO Box 2999 Clifton NJ 07015-2999
12/2 ES 1800 MUF FM?...12/8 ES MUF 4 @ 1700, 12/9 ES 1700 MUF 2 weak! gone by 1745, 12/12 Trops to the South 200 mi.

WESTERN TV-DX

January 1992

Fred McCormack
Box 17860
St. Paul MN 55117-7860

Deadline: 02-06-92
Cut-off: 11-01-91

November produced an unusual amount of E skip as well as F2. E skip was reported on November 5, 7, 9, 10, 22, 24, 28, 29 and 30. F2 was reported on October 29 and November 8, 9, and 19 by Dyer. Some nice tropo was also caught, particularly by Draeb.

CORRECTION TO LAST MONTH'S CORRECTIONS - This distance from Bill Draeb's house to CHSJ-4 is 1067 miles, not 1230 miles or 1350 miles. I hope I got it right this time!

New____ New Mode_ _ Tent. - t Unidentified - unid S/On - + S/off - =
ID Color Bars - @ Unid Color Bars - % Misc. Test Patterns - &
Parallel Programming - // MTS Stereo - $

William Draeb, Ellis St., Rt. #2, Kewaunee WI 54216 (414-388-2350) CST

Local WPNE-38 was off the air from November 9-14. I talked to someone who works for the station, part time, at UWGB and he said the "transmission line fried." About 800' of transmission line (from the transmitter to the 800' level) had to be replaced.

November 1991

13 tr 1730 KXLI 41 MN 310
(HSC)
KSAX 42 MN 374
W48-- 48 ??
(// WHWC-28)
2122 Iron Mtn Us 100
Lac du Flambeau
Us 155
16 tr 1741 KXLI 41 MN 310
KSAX 42 MN 385
KRWF 43 MN 395
1751 KVRR 15(MN) 450
K58BS 58 MN 285
(Minneapolis TBN)
1945 Central IL Us
(Snow free)
WEIU 51 IL 345
KAWB 22 MN 365
W57AR 57 WI 145
(Sayner WSAW- 7)
W45AJ 45 IL 165
(Rockford CHA)
2035 WKEF 22 OH 365
(Over WSBT-22)
WCET 48 OH 400
WKON 52 KY 437
WIII 64 OH 400
WCVN 54 KY 407
2115 WTVQ 36 KY 473
WKLE 46 KY 473
WXIX 19(OH) 400
KVRR 15(MN) 500
(Stronger)
KAWB 22 MN 365
(KAWB-KAWE ID)
2150 Mpls 17,23,29
(Not in earlier)

17 tr 0230 WYTV 33 OH 420
0545 WNEO 45 OH 405
WEAO 49 OH 380
0554 WFMJ 21 OH 420
WPGH 53 PA 480
0724 Cincinnati Us400
0725 WKON 52 KY 437
WDRB 41(IN) 437
0908 WKRC 12 OH 400
1632 CBLN 40 ON 325
CICO18 18 ON 325
CBLFT9 53 ON 325
WKBN 27 OH 420
CIII29 29 ON 290
(Diag. CCI-WGTU)
1729 WUHQ 41 MI 165
(With WOTV news)
19 tr 2032 KXLI 41 MN 310
KSAX 42 MN 385
21 tr 1955 W40AK 40 MI 110
(Muskegon CHA)
(See Note # 1)
22 tr 1828 WSBN 47 VA 580
(See Note # 2)
WEMT 39 TN 635
(Snow free)
WIII 64 OH 400
W25AI 25 OH 400
(Cincinnati CHA)
WCET 48 OH 400
WCVN 54 KY 407
WKON 52 KY 437
WNEO 45 OH 405
WTVQ 36 KY 473
WYMT 57 KY 550
WKSO 29 KY 520
WKHA 35 KY 550

22 tr 1828 WDKY 56 KY 480
(See Note # 3)
WMSY 52 VA 605
WKYT 27 KY 473
WLEX 18 KY 473
1840 WYTV 33 OH 420
WKBN 27 OH 420
1841 *WQEXt 16 PA*
WPTTt 22 PA
WDRB 41(IN) 437
WPBO 42 OH 461
1848 *WWATt 53 OH*
WPGHt 53 PA
CBLFT9 53 ON 325
WFLIt 53 TN
CBLN 40 ON 325
CBLN4 45 ON 307
CBLFT17 68 ON265
CITY2 31 ON 350
WJET 24 PA 405
CICO18t 18 ON
WNED 17 NY 445
WOSU 34 OH 395
1916 WHME 46 IN 210
(See Note # 4)
WKPT 19 TN 620
1923 WSFJ 51 OH 395
unid channel 51
(See Note # 5)
1930 WGGN 52 OH 315
2023 WKLE 46 KY 473
2103 *WGRBt 34 KY*
(See Note # 6)
24 Es 1900 *WPBTt 2 FL*
WTVJt 4 FL
WEDU 3 FL 1192
unid channel 5

Note # 1 - Live "TV BINGO"; station off frequency slightly. Had to adjust horizontal hold to lock in picture.
Note # 2 - "Blue Ridge Public Television" - snow free - ID slide with WBRA-15, WSBN-47, WMSY-52.
Note # 3 - No sign of WYIN-56 or WJYS-62.
Note # 4 - Carrying WNDU-16 weather delayed about one half hour.
Note # 5 - Same direction as WSFJ; zero offset to WSFJ.
Note # 6 - Rain getting heavier; DX falling: mostly gone at 2230.

John Ebeling, 6843 County Road 47, Alborn MN 55702 (218-345-6718) CDT/CST

Equipment:
General Electric 19EC0740W (1980) - electronic tuning (no fine tuning). Antennas in the attic - one pointed south towards Minneapolis/St. Paul and the other aimed southeast towards Duluth - selection via knife switch. Neither antenna is a DX type.

September 1991

```
 1 Es 0003  CFCN   4 AB 1010
            unids chs 2-6
      0035  CKKX   2 AB 1015
 2 Es 0100  CKKX   2 AB 1015
            (In until 0135 )
 8 Es 0830  unid channel 2
```

November 1991

```
29 Es 1800  unids chs 2-3
            KPRC   2 TX 1215
```

Pat Dyer, 5315 Silvertip Drive, San Antonio TX 78228-2744 CST

Equipment:
KTV 12" 1210A b&w, Archer V-100 and 8-bay bow-tie UHF array at 20 feet with rotor.

October 1991

```
 1 Es 1958  WSAV   3 GA 1040
      2036  WWAY   3 NC 1235
14 tr 0729  KADN  15 LA  385
      0755  K21DM 21 LA  395
      (Lafayette          VJN)
      0759  WLPB  27 LA  445
18 tr 0004  KLAX  31 LA  385
      0102  KBMT  12 TX  285
      0959  WVLA  33 LA  440
20 Es 1128  WCBD   2 SC 1140
      1159  WWAY   3 NC 1235
29 F2 0834-0942 unids ch 2
      1716-1833 unids ch 2
```

November 1991

```
 5 Es 1458  WSAZ   3 WV 1125
      1600  WSJK   2 TN 1010
      1616  WBTV   3 NC 1090
            WFMY   2 NC 1175
 7 Es 0928  KDLO   3 SD 1070
      0929  KUSD   2 SD  945
 8 F2 1849-2020 unids ch 2
      2315-0000 unids ch 2
 9 F2 0000-0045 unids ch 2
   Es 0230  WPBT   2 FL 1150
      1557  KOTA   3 SD 1040
      1651  KTWO   2 WY 1010
      1700  KXMA   2 ND 1215
 9 Es 1949  XHBC   3 BN 1025
      2059  KUTV   2 UT 1085
      2154  KVBC   3 NV 1050
      2155  KTVK   3 AZ  835
19 F2 0925-1054 unids ch 2
      1110-1122 unids ch 2
      1635-1700 unids ch 2
22 Es 1142  KGAN   2 IA  960
28 Es 1653  KDLO   3 SD 1070
      1659  KGFE   2 ND 1290
30 Es 1801  KGAN   2 IA  960
      1825  WCIA   3 IL  930
```

A fair amount of E skip in October-November. K21DM had a jukebox format - and lucky to get with local 20 LPTV and other channel 23.

The big news was, of course, the F2 events. Many minutes of these were caught with the VCR. A 4-head machine and some video processing software might be able to extract a lot more.

The November 8-9 events were due to the severe magnetic storm. The two later episodes there had "pulsing" effects, perhaps indicating some TE involvement.

73, Pat, WA5IYX

Dave Sinclair, 6565 Brooks Street, Vancouver BC V5S 3J6 PDT/PST

Equipment:
Archer antennas: VHF-FM model 15-8654 on Channel Master Crown rotor 5 feet above roof. UHF model U-120 10 feet above roof. Archer amplifier model 15-1113, adj. 10-20 dB. Both mounted on separate chimneys (straps). Electrohome VCR VHS, Sony colour TV model KV1215, Philips converter model CT3600 which has separate inputs for cable, VHF and UHF, stereo.

October 1991

```
 9 Es 2130 $KVBC   3 NV  996
10 tr 2100  K68DL 68 WA  111
      (Seattle            TAB)
            K53AZ 53 WA  185
      (Centralia     KIRO- 7)
14 tr 0200  KBSP  22 OR  288
            (KTZZ-22 off)
19 tr 0300 $KATU   2 OR  252
            (CBUT- 2 off)
20 tr 0400  KATU   2 OR  252
            (CBUT- 2 off)
```

November 1991

```
 8 tr 1500  K47-- 47 WA
            (Unknown      KOMO- 4)
10 Es 0715 $KVBC   3 NV  996
28 tr 1700  KPDX  49 OR  252
                   (See Note)
```

Note - Received with Knowledge Network rebroadcaster off air due to storm.

Channel three received over CBUT-2 rebroadcaster at Chilliwack, British Columbia, 56 miles east, 590 Watts erp. This rebroadcaster stays on all night with a colour bar and is fed by CBC North.

Best wishes for 1992 to all!

Thanks to all who reported in 1991. Good Luck in 1992 and keep reporting!

NORTHERN FM·DX

GREG CONIGLIO
5100 GLENWOOD DRIVE
WILLIAMSVILLE, NY 14221

For DXers in: MA,NH,VT,CT,MA,RI,NY,PA,NJ,OH,MI,IN,IL,WI,MN,IA,NE,SD,ND,MT,WY,ID, WA,OR,AK,Canada

JANUARY 1992 ⟶ DEADLINE: The 5th ⟶ LOG CUTOFF: 2 months from when mailed

Not much to report this time, not much trop, though there was some surprise e-skip early in November, and there has been plenty of aurora. Let's hear from you! One note: The CCI-Unids column is now done by Matt Sittel. Please send your unIDs to his column instead of here. I am glad to see that column back; I know many enjoy that column. Happy New Year!!

1991 E-skip report.

The top 20 e-skip openings in 1991

*note: The late season opening in November is not included.

Reports taken from Northern and Southern FM DX

DATE	TOTAL	rep	avg	MUF	high
1.JULY 1	491	28	17.54	144	64
2.JULY 19	442	27	16.37	209	43
3.MAY 29	272	29	9.38	107.9	30
4.JUNE 3	159	7	22.71	108.5	52
5.JULY 30	144	12	12.00	107.7	38
6.JULY 8	143	10	14.30	107.9	38
7.JULY 18	142	16	8.88	144	36
8.JULY 31	122	11	11.09	107.9	32
9.JUNE 29	116	15	7.73	106.1	20
10.AUGUST 23	113	9	12.56	107.9	26
11.JULY 20	111	16	6.94	107.5	25
12.JULY 2	100	13	7.69	107.5	24
13.MAY 19	93	5	18.60	108.3	42
14.JUNE 12	78	5	15.60	105.9	25
15.JUNE 30	66	11	6.00	103.3	13
16.JUNE 20	63	9	7.00	105.5	13
17.JUNE 8	60	14	4.29	107.7	28
18.MAY 20	37	4	9.25	107.3	20
19.JUNE 16	37	9	4.11	107.3	8
20.JULY 22	33	10	3.30	97.1	8

TOTAL (60 days) 3298 avg of 54.97 reports per skip opening, average MUF: 106.0 Mhz

Key:

total = total number of loggings reported that day

rep = number of DXers reporting noting skip that day

avg = average number of loggings per DXer that day (total ÷ rep)

MUF = maximum useable frequency reported that day

high = most loggings reported by a single reporter that day

Breakdown by month:

	no of days	total for month	avg
JULY	18	1828	101.56
MAY	9	483	53.67
JUNE	22	782	35.55
AUGUST	8	199	24.88
SEPTEMBER	3	6	2.00

(There have been some October and November openings not counted here)

Breakdown of MUFs:

	no. openings	percent reaching this level
up to 108.0 +	5	8.33%
up to 107.9	10	16.67%
up to 105.1	32	53.33%
up to 100.1	40	66.67%
up to 98.5	44	73.33%
up to 96.1	52	86.67%
up to 92.1	58	96.67%
up to 88.1	60	100.00%

Happy New Year

STEVE SOLOMON - 2 BENNETTWAY #24 - NEWMARKET, NH 03857 (603) 659-3470

Equipment: Yamaha TX-9300 tuner with 2 180 khz filters, ALL loggings are new.

JULY 1991

2 Es
1000 KKXL 92.9 ND Grand Forks
1035 WOW 94.1 NE Omaha, country
1037 KXLP 93.1 MN New Ulm, AOR o/WMGX
1042 KDWZ 93.3 IA Des Moines, CHR, Z-93
1045 KTSB 93.9 IA Sioux Center
1047 KQWB 98.7 MN Moorehead, Q98, AOR
1100 KTCZ 97.1 MN Minneapolis, Cities FM
1100 KISD 98.7 MN Pipestone, Sat. CHR
1124 KXRA 92.3 MN Alexandria, AC
1135 KKCK 99.7 MN Marshall, AC
1159 KSDN 94.1 SD Aberdeen, AC

4 Tr
0115 CFGL 105.7 PQ Laval, WVBF off the air
0121 WHMX105.7 ME Lincoln, Hot Mix 106 CHR, WVBF off the air
0128 WWKX 106.3 RI Woonsocket, Kicks 106 CHR-dance, over everything

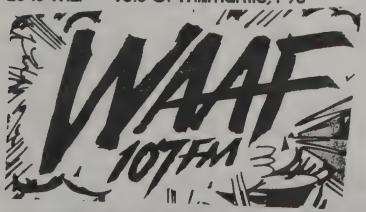
5 Es
1035 WOVV 95.5 FL Ft.Pierce, CHR
1057 KWNC 96.5 SD Sioux Falls
1057 WHTQ 96.5 FL Orlando, Q96, AOR
1120 WWLV 94.5 FL Daytona Beach, Love 94

5 Tr
1145 WCIB 101.1 MA Falmouth, Lite 102, ac, heard over WPOR
1146 WQRC 99.9 MA Barnstable, beautiful

8 Es
1032 WOMC 104.3 MI Detroit, oldies, during thunderstorms
1100 WKYQ 93.3 KY Paducah, country

21 Tr
0317 WRKI 95.1 CT Brookfield, AOR, I-95 tight squeeze (WHOM & WCQL?-gc)
0330 CKMF 94.3 PQ Montreal, CHR, Star 94 is off the air, French
0350 WQGN105.5 CT Groton, WJYY off the air, Q105, CHR

30 Tr
0000 WMDK 92.1 NH Peterburough, AC
2340 WBLQ 99.3 RI Block Island, AC
2343 WILI 98.3 CT Willimantic, I-98



AUGUST 1991 DX

11 Es
1143 WLLZ 98.7 MI Detroit, Detroit's Wheels AOR, only 640 miles

The following logged in car in Exeter,NH
1325 WXBM 102.7 FL Milton,
1330 WAPW 99.7 GA Atlanta, Power 99, CHR
1335 WFOX 97.1 GA Gainesville, Fox 97, ac
1340 WXFX 95.1 AL Prattville, The Fox, AOR
1349 WSKZ 106.5 TN Chattanooga, KZ 106.5
1358 WZZK 104.7 AL Birmingham, country
1425 WVRY 105.1 TN Waverly, V-105, country
1430 unID 105.3 "The All New Q-105.3"

15 Tr
2315 WKSS 95.7 CT Hartford, Kiss 95.7, CHR and dance, WZID off the air

16 Tr0300 WYHT 105.3 OH Mansfield, Y-105, CHR

26 Tr
0129 CFRQ 104.3 NS Halifax
0140 CFQM 103.9 NB Moncton
0152 CBH 102.7 NS Halifax, divers.
0155 WBAZ 101.7 NY Southold, Lite on the Bay
0200 WFAL 101.1 MA Falmouth, F-101,sat CHR
0211 CIOO 100.1 NS Halifax, C-100, AOR
0300 WCME 96.7 ME Boothbay Harbor, country over WWEM
0313 WWMJ 95.7 ME Ellsworth, oldies o/WZID
0324 WPBC 92.9 ME Bangor

SEPTEMBER 1991 DX

10 Tr
0324 WFME 94.7 NJ Newark, Family Radio
0324 WRKS 98.7 NY New York, 98.7 Kiss FM

11 Tr
1431 CIRO 99.7 PQ St. Georges de Beauce Country, French

17 Tr
2334 WQHT 97.1 NY New York, dance-CHR

19 Tr
0005 WEBE 107.9 CT Westport, Wee Bee 108 adult contemporary, over WXKS

23 Tr
0040 WPKX 97.9 CT Enfield, Kicks 97.9, country, WWGT off the air

30 Tr
0100 WMKS 93.5 VT Springfield, Kiss 93.5 satellite adult contemporary

OCTOBER 1991 DX

1 Tr
0010 WTSL 92.3 NH Hanover, ac
0100 WFRD 99.3 NH Hanover, AOR

10 Tr
0200 CFCA 105.3 ON Kitchener, easy, 490 mil.

STATION NEWS: In Pittsburgh, 104.7 is now religious, and was heard as WORD. Thanks Dave Nieman. Over in Eastern Pennsylvania, WAEB-FM Allentown (104.1) is still top 40, but it now using the slogan "B104", dropping "Lazer 104.1". In that general area, WJRZ 100.1 Manahawkin changes to a classic hits format. In the Albany area, WRAV Ravena (94.5) is on the air with an adult contemporary format, "Mix 94." Thanks Bill Nienajadly. Other NJ news: WTTH Margate City (96.1) is on the air, urban adult contemporary. Thanks Bob Smolarek.

DAVE NIEMAN-12284 NICE RD-AKRON NY 14001-9529

Equipment: Carver TX-11 modified IF, CM Stereo Probe 9 at 30'. Alliance HD-73 rotor and RG-11 coax. New call [KKKK].

NOVEMBER 1991 DX

3 troposcatter

1349 WAFX 106.9 VA Suffolk, "106.9 THE FOX" op$ 442

5 troposcatter

0821 WRVL 88.3 VA Lynchburg, ID, g$ 394

Is WBYN new or format change? Dave

19 troposcatter

1000 [WORD] 104.7 PA Pittsburgh, ID, g$ 197 ex. WEZE, WYDD & WPGH.

DECEMBER 1991 DX

2 troposcatter

1409 WBYN 107.5 ?? ???? ,call, g$???

Delaware County's 1st Radio Station

WDLA

1270 AM 92.1 FM

Box 58
Walton, NY 13856
(607) 865-4321

DAVE NIEMAN-HO STA GEH RD-ROCK CITY NY

Equipment: Technics ST-8080 modified IF, Antennacraft FM-10 at 15'. Radio Shack rotor, RG-6 coax. All new to Rock City log.

NOVEMBER 1991 DX

17 tropo

1105 CKNX 101.7 ON Wingham, "FM-102", r$ 183

30 tropo&scatter

1600 WAER 88.3 NY Syracuse, ID, j$ 134 (WSBU off)

2028 WNFA 88.3 MI Port Huron, call, g$ 209 (WSBU off)

DECEMBER 1991 DX

1 troposcatter

0233 WJMO 92.3 OH Cleveland Heights, "Jammin -92", s$, (WRRN off) 154

0259 WRKT 100.9 PA Northeast, "Rocket-101" r $, (WMXO off) 73

0321 CFLY 98.3 ON Kingston, "FLY-FM", rm $, (WQRT off) 183

Dave

WILLIAM R. HEPBURN - 35 LOCKWOOD RD - BRAMPTON ON L6Y 4T7 (EST)

Equipment: modified JVC R-X330V w/indoor dipoles

NOVEMBER 1991

1 AU

1756 unids (10-15 db)

8 AU

2100 WPLM 99.1 MA Plymouth T (calls tent. heard)

2114 WMYX 99.1 WI Milwaukee 415 (10 db, state # 20)

2121 WYLL 106.7 IL Des Plaines 430

2355 unid 94.7 USA ?? T (SRN, Star Radio Network, 10 db)

9 AU

0002 WRVL 88.3 VA Lynchburg 445 (state # 21)

0029 CJMV 102.7 PQ Val-D'Or (FF) 325

10 TR

1254 WONE 97.5 OH Akron- 190 Cleveland-Canton

19 TR

2341 WFMK 99.1 MI East Lansing- 245 GrandLedge-Lansing

Comments: More Auroral DX! More garbling. More noise. More tests of patience. Much like trying to understand what someone 300 feet away is saying...challenging but fun.

73s, Bill.

STATION NEWS: A new regional satellite network has been established in the Northeast U.S., called NESN: North East Satellite Network. Programming is adult contemporary and in the evenings. So far these FM stations have reportedly signed on: WWSE 93.3 Jamestown ,WKPQ 105.3 Hornell, WFLR 95.9 Dundee, WVOS 95.9 Liberty, WENY 92.7 Elmira, WTOJ 103.1 Carthage, WKGW 104.3 Utica (all in New York State). WDNO 95.3 Laurel, Md. is now on the air...WROU 92.1 West Carrollton (Dayton), Ohio is expected on soon with an urban format, "U92" Speaking of Carrollton, WKFK 100.5 (Michigan) is expected to go to top 40, WTCF, "The Fox". WTRV 94.3 is // WAIR 92.5 in Upper Michigan, oldies.

JERRY MONROE - 3135 FALLS ROAD - MARCELLUS, NEW YORK 13108

Equipment: JVC tuner (two 110 khz IF filters), 10 ele FM yagi, Various other antennas, traps, filters amplifiers, etc!

SEPTEMBER 1991 DX

5 Tr

1500 CKAT 101.9 ON North Bay, on car radio

1800 CFRC 101.9 ON Kingston, car radio again solid signal.

18 Tr

2030 WPAC 92.7 NY Ogdensburg the real hits"

2035 WYUT 92.7 NY Herkimer not on the air!

2155 WKOJ 92.7 NY Middletown, "92.7 KOJ" Hard rock, tough reception

OCTOBER 1991 DX

2 Tr

0445 unID 88.9, who is this all night BBC mono signal? (Jerry, I think I read somewhere that Auburn does this. Can anyone confirm?-gc)

7 TrS

1200 WAWZ 99.1 NJ Zarepath, wx for Cent. NJ

8 TrS

1040 WPLR 99.1 CT New Haven, PLR, Bowie

October 27 Tr

0150 WRTY 91.1 PA Jackson Township, Jazz 90 Fund Drive, over CJRT's all night tone

0210 WETD 90.9 NY Alfred, s-off in strong. I turned this station on in 1973!!

0225 WVCR 88.3 NY Loudonville, strong, metal

0230 WBUR 90.9 MA Boston, "Musica Africa Latina" all nite, good signal.

0235 WKNE 103.7 NH Keene, with winning nos in the Massachusets Lottery.

0255 WKRH 105.9 ME Bath, heard carrying all nite KRH satellite feed. ID as "Maine's Classic Rock, WKRH Bath-Augusta", new state!

0330 CIUT 89.5 ON Toronto, Bootleg Reggae!

29 Tr

0032 WUCX 90.1 MI Bay City, with weather for central Michigan and back into jazz

0040 Trops gone to aurora, excellent visual display (same on November 8-gc) outside, aurora extended into southern sky at times (same here, how does that happen?-gc), with the sky turning red at times. Nothing IDed, just noise!

WNJA FM 89.7

Well, seasons greetings to all, hope conditions were good during the holidays. The week of October 26 to November 2 was loaded with trop activity. October 30th CIXK 106.5 Owen Sound, Ont. was in perfect on my 20 mile drive to work; not bad for 225 miles. The combination of snow in the west and a "nor-easter" off of New England brought one of the best Indian summers here in recent memory. Still planning on building a rhombic before the ground freezes, all I need is some free time! 105.9 brought a new state (Maine), though I still am confused on the call. (They are WKRH, not WIGY anymore-gc). the KRH DJ gave out a 800 number, so I called him and asked where he was. He said Dallas, Texas; this surprised me unless I had E-skip off the back side, then he said he was on a satellite network and yes they feed a station in Maine. A later ID said WKRH Maine's Classic Rock. I'll take it!. One last note: 100.9 WEZG claiming to be twice the power, now 6 kw!. 73s Jerry

DOUG SMITH - 14 BROOKSIDE COURT - NASHVILLE, TENNESSEE 37209-4503

Equipment: Sony ICF-2010, whip antenna, DXing in New England (where?-gc)

OCTOBER 1991 DX

23 Tr

Stations heard at ≈ 2300

WHJY	94.1	RI Providence	145
WSRS	96.1	MA Worcester	135
WNTX	96.3	MA Nantucket	200
WCTK	98.1	MA New Bedford	145
WPLM	99.1	MA Plymouth	180
WWRX	103.7	RI Westerly	115
WFCC	107.5	MA Chatham	210
WRIU	90.3	RI Kingston, 3.4 kW	130
WSNE	93.3	MA Taunton	145
WAAF	107.3	MA Worcester	135
WVBF	105.7	MA Framingham	155
WCRB	102.5	MA Waltham	155
WCDJ	96.9	MA Boston	155
WBRU	95.5	RI Providence	145
WXKS	107.9	MA Medford	145
WHUS	91.7	CT Storrs, 3.2 kW	95
WROR	98.5	MA Boston	155
(calls are now WBMX-gc)			
WBCN	104.1	MA Boston	155
WMJX	106.7	MA Boston	155
WSSH	99.5	MA Lowell	155
WFPG	96.9	NJ Atlantic City	135
WKTU	98.3	NJ Ocean City, 3 KW	135

24 Tr (from car on I-84)≈0800 from Middletown,NY

WJBR	99.5	DE Wilmington	130

≈0830 from Port Jervis, NY

WDRC	102.9	CT Hartford	105

DON'T FORGET TO SEND IN YOUR DX!

Bill Nienajadly PO Box 2999 Clifton NJ 07015-2999

Trops from October 22 thru Oct 27. Nightime,Boston FM's reaching full strength pinning the meter plus other stuff from DC,Baltimore,Virginia Beach VA, Central PA,Hudson Valley and other areas out to 300 miles (at times). In the Mornings, WAAF 107.3 was noted several days ina row going to work on the car radio (Im now using a Delco AM/FM digital car radio circa 1982 or 1981 modified with TWO 110 khz filters). Trops during this period were at or near local strength. Best nite was Oct 23. Highly Edited. Stations would fill page & a half

1850 WBLQ 99.3 RI Block Island
1900 WHMP 99.3 MA Northampton (rare)
1915+WWBB 101.5 RI Providence o/WMSC
WHJY 94.1 RI Providence LOCAL STRENGTH
WCTK 98.1 MA New Bedford LOCALSTRENGTH
WJFD 97.3 MA " " " " " " "
1930+WSHU 91.1 CT Fairfield over 8 mile WFMU!
WHCN 105.9 CT Hartford over 12 mile WNWK
WPLR 99.1 CT New Haven over WAWZ Local strength
2050 Boston picking up fast
2100 Had to leave, 2320 Back in.

2330+ Areas to the Southwest in Boston 100 db All Class B's in. Norfolk VA, Eastern Shore MD, Hurlock 100.9 MD & New London CT 100.9 fighting it out, WYFI 99.7 WOLC 102.5 + many, many others. WHOM 94.9 Mt Washington NH also in with steady tropo. Providence RI, New Bedford+ other Eastern New England FM stations.

Overall, a VERY dramatic WEEK of tropo, but it didn't get me Maine or anything into NC except 93.7 Moorehead City NC. I belive as others (here in NJ) that one of these openings had potential to go real deep into NC,SC,VA and possibly GA too. Oh Well.
Heard a POLKA music program on Sunday morning @ 0730+ on 98.1 Oct 27..any ideas?

11/3/91 0230-0300 On the modified Delco Digital with 2 - 110 khz filters car radio in the car, driving in Fairfield NJ going to Montville NJ. Noticed NYC locals off the air 92.3, 96.3, 97.9, 98.7,100.3,102.7,104.3, 105.1, 107.5 ALL OFF THE AIR!
I couldn't come home to DX right away, so DXed on the car radio and found.....
....WKSZ 100.3 Media PA, WSKR 102.7 Petersburg NJ tent with CNN news and sports..
...WIYY 97.9 Baltimore MD, WWSH 97.9 Hazelton PA, UNID 97.9 Country Enfield CT?
....105.1 Country music Ephrata PA assumed, Batlimore 102.7 "V-103" Some of these I could have counted in the Clifton log as these were heard 8 to 11 miles from my Clifton QTH but my personal mileage for counting anything in the Clifton log is a approx FIVE miles, club rules say 25 miles radius is countable but I feel bettar with the FIVE mile limit.

11/8/91 A very strong aurora activity noted on the car radio at 1740 and when I got home, TV was messed up to ch 10+!!! This was far stronger than 3/13/89. I heard there was E-skip later on in the evening on TV but I missed it.

11/14/91 2000+ Very good Tropo/scatter, it was really a comination of both. I heard CHTZ 97.7 St catherines ON at 310 miles, WVOR 100.5 Rochester NY 235 miles, at 2200+ rarely heard WGBI 101.3 Scranton PA (rare do to strong WKCI CT off the back), WPEL 96.5 Montrose PA, WKRZ 98.5 Scranton PA, WDNH 95.3 doing real nice here, WKGB 92.5 way over WXTU in fact WKGB was there for a hour or so, WVOS 95.9 Liberty NY strong for a while (rare), WWDL 104.9 Scranton PA only the second time I heard them, WHWK 98.1 Binghampton NY, 2250 Very rare WPCX 106.9 Auburn NY (near Syracuse), A bit later into the midnite hour I heard WDBA 107.3 DuBois PA at 249 miles along with Utica 107.3 and I did hear some MS bursts on 107.3. Overall, not no blockbuster opening by far but rather a chance to hear some rare or otherwise very weak stations at very good strength.
I did notice that the 94.3 translator in Pomona NY is now relaying WBAB 102.3 now. Bill Nollman tells me Digikey is all sold out with the 110 and the 150 khz filters and it will be a 14 week wait again for them. I knew this would happen. Oh Well

The Mod Delco digital is excellent with the TWO 110's, sound quality is OK. Went to Joe Fela's house where I modified his GE Superadio with one 110 khz filter. He bought out another GE Superadio which I modified months earlier with a 150 khz filter. We compared both Superadios and the one with the 110 filter dug out Baltimore 106.5 and Wash. DC 107.3 where as the 150 khz Superadio could barely get, I should mention we were using a whip antenna for this comparison test, trops were up a bit too. At Joes house, in my car we checked out the selectivity of my Delco car radio. He seemed impressed that the Delco in the car using the window antenna could get stations like 94.9 Harrsburg PA (WFME 94.7 is so wide that 94.9 is usually covered up even on modified radios) Also WXMH 99.7 from Central PA, WVOR 100.5 Rochester with WRCH 100.5 CT, All adjacents were in the clear with no adj channel interference, DC, Balt,adj's all perfect, By now you should get the idea how well the 110 filters work. Joe lives 2 dozen miles from NYC were I live only a dozen miles from NYC, so the Delco did perform better there. Those who haven't yet gone on to modify your car radio, by all means do! Find out what you are missing! Goodxing!

SAUL CHERNOS - P.O. BOX 611 - ORILLIA, ONTARIO CANADA L3V 6K5

From Orillia
JULY 22,1991 Es
1800 KECA? 89.3 "KECA in the Capitol City"
AUGUST 1991 DX
17 Tr (CIDC off)
0130 WNNR 103.5 NY Sodus, rp
22 Tr
0757 WNJA 89.7 NY Jamestown,// WNED 94.5
25 Tr
0953 WFMK 99.1 MI E.Lansing
1036 CITE1 102.7 PQ Sherbrooke, French
1040 WBLV 90.3 MI Twin Lakes
SEPTEMBER 30 Aurora
1649 WDSD 94.7 DE Dover
From Burnt River
July 31 E-skip
1852 WJIS 88.1 FL Bradenton
AUGUST 1991 DX
13 Tr
1645 CJMJ 100.3 ON Ottawa, New Magic 100
1700 CJMV 102.7 PQ Val D'Or
OCTOBER 14 Tr
0643 WSNN 99.3 NY Potsdam
14 MS
0723 KEBC 94.7 OK Oklahoma City
94 Country KEBC
23 Tr (WBSU off)
0200 WCID 89.1 NY Friendship
0713 WNJA 89.7 NY Jamestown, // WNED 94.5
24 Tr
0456 WJSL 90.3 NY Houghton, g
0600 CHUO 89.1 ON Ottawa
25 Tr
1523 WNYP 99.9 NY Cortland, Power 99.9,rp
1536 WCPZ 102.7 OH Sandusky
1958 WFRO 99.1 OH Fremont
2000 WAAL 99.1 NY Binghamton
2230 WEMU 89.1 MI Ypsilanti
2307 WTGV 97.7 MI Sandusky
2327 CHIKt 98.9 PQ Quebec City, Radio Mutuel Network ID, French

Not a season to write home about. Es had tunnel vision to Florida and summer and early fall tropo has stunk. Delaware a new state in Orillia, though had same station on Tropo in May at Burnt River. The French station during July 20 Es really intrigues me. Florida, Louisiana, or Carribean? (Could it have been 88.7? I think I have seen reports of KRVS Lafayette being French once in awhile-gc). I doubt Quebec. WGMX calls heard on 94.3 same date, and references to FL Keys, so they were not yet on 94.7. CJMJ is operating in Ottawa, and so is CHUO, which can be heard in Ottawa, though on a fade-in and out kind of basis. Its programming is French and English and it's run out of the University of Ottawa. I strongly suspect Quebec City on Aug 25, but there's a remote possibility that the freq. was 99.1 (I haven't digital readout and 99.3 and 98.7 are strong enough that what's in between often is hard to determine. 73s, Saul

GEORGE GREENE - 1527 SUNSET AVENUE - AKRON, OHIO 44301

Equipment: McIntosh MR78 tuner, Stereo Probe 9 approx 35' above ground, new are underlined

OCTOBER 1991 DX
30 Tr
2048 CBEF1 103.1 ON Leamington, French prog., by carefully nulling CIQM London...was easier to hear on the car radio that night!
2300 CJXY 95.3 ON Hamilton, classic rock, Y-95 numerous other re-logs from western NY to eastern MI that night with very good signals.
OCTOBER 1991 DX
31 Tr
0038 WXTA 97.9 PA Edinboro, country music
0040 CJBC4 99.3 ON London, more French CBC
0041 CFGX 99.9 ON Sarnia, a/c, "The Fox"
NOVEMBER 1991 DX
0028 WWHT 105.7 OH Marysville, "Hot 105" urban CHR music right through local WMJI!

Noted severe aurora cx on Friday the 8th while driving across northern OH/IN (not to mention a great visual display of the Northern Lights, too)---FM reception very poor that evening w/nothing of note heard. BIG cold front went thru here on 11/1 and temps and cx haven't been the same since, heh. 73.

BOB SMOLAREK - 156 OLDWICK ROAD - WHITEHOUSE ST,NEW JERSEY 08889

Equipment: McIntosh MR78, Carver TX-11, Stereo Probe 9

SEPTEMBER 1991 DX
30 Tr
2300 WSKR 102.7 NJ Petersburg, all sports
NOVEMBER 1991 DX
8 AU
1915 WBPR 97.7 SC Georgetown,r,Power 98
1920 WKZQ 101.7 SC Myrtle Beach, rp
1925 WXLY 102.5 SC N.Charleston, o
1935 WVES 99.3 VA Accomac, b
14 Tr
2100 WPGM 96.7 PA Danville, g
2200 WKSB 102.7 PA Williamsport, r
November 18 Tr
2000 WTTH 96.1 NJ Margate City, s
2015 WKSB 102.7 PA Williamsport, r
again over WNEW!!

Comments: November 8th produced the first aurora that I was able to identify, thanks to Bill Nienajadly for the tipoff. I was hoping to hit 1,000 stations heard by the end of the summer but the lousy E-skip season ended that wish. I'm at 941 now. 73s Bob.

dBRUCE HALL - 5 STIRTON AVE. - BRANTFORD, ONTARIO CANADA N3T 1E2

Equipment: JVC JRS 201 receiver (mod with 3 150 khz filters), Magnum Dynalab 205 Sleuth, Probe 9 fed with RG6 at 50 feet AGL, Crown rotor, Distances are in kilometres

SEPTEMBER 1991 DX

27 MS

0807 WCOW 97.1 WA Sparta, k, local ad heard with Wisconsin mention, followed by calls 902

28 TrS

0855 WVSR 102.7 WV Charleston, r, Super 102 after local ad, Bob & Josh of Morning Zoo 541

30 TrS

0759 WWCK 105.5 MI Flint, r, CK 105.5 after ad for U of Mich. Berlin "Take My Breath Away" 288

OCTOBER 1991 DX

1 TrS

0721 CFBK 105.5 ON Huntsville, rm, Birthday messages, time check, Lenny Kravitz music 265

2 Tr/TrS

0746 WWKS 106.7 PA Beaver Falls, r, Kiss 106, "Adult Rock Hits all the time", followed by BST mx "Spinning Wheel", format change? 267

0800 WWYN 106.9 TN McKenzie, k, Win 107, local mx with ment of 3 Jackson youth 687

7 GW

0715 CINQ 107.9 ON Burlington, rs, Dance 108 new nonID from Monday to Saturday 35

9 MS/Tr

0720 WSLQ 99.1 VA Roanoke, r, Q99, nonID 655

0802 WMYX 99.1 WI Milwaukee, legal ID Traffic report 633

10 MS

0801 WPLR 99.1 CT New Haven, pr, Rock 99 calls head, relog from 11/18/90 MS log 602

OCTOBER 1991 DX

13 MS

0800 WAWZ 99.1 NJ Zarepath, g, "Committed to bring you --- we are 99.1 WAWZ Zarepath NJ" 506

18 MS

0729 KDEA 99.1 LA New Iberia, mr, y/l with calls, former E-skip, 6/12/90 1817

20 MS/Tr

0833 WHCM 99.1 WV Parkersburg, k, Power Country 99, mention 25,000 watts power 460

1001 WHKO 99.1 OH Dayton, k, K99, Continuous Country Favourites K99FM 515

22 TrS

1934{WMJT} 100.9 MI Piconning-Saginaw, rm Magic 101 after music by Stevie Wonder 322

24 TrS

0803 WKYS 93.9 DC Washington,rs, 93KYS 552

25 TrS

0745 WFCB 94.3 OH Chillicothe, r, B94, local ad for Papa Dions Pizza, B94 heard 483

26 TrS

0818 WDSD 94.7 DE Dover, k, "Hey! Where are you calling from? Newark, Georgetown, Princeton, NJ, it's now easier to get thru on our toll free line 1-800-955-WDSD, call us anytime" 598

27 TrS

0718 WELK 94.7 WV Elkins, r, NEW K95, station promo for bumper stickers at local business 475

Happy Holidays, Merry DX Mas, 73dB

MARK STRICKERT - 3852 N. OCONTO - CHICAGO, ILLINOIS 60634

88.3 WXAV is on, heard on the way south 10/31, with odd mix (metal, R & B, jazz). Signal not great anywhere, but it does get out to the south and west all right. Yes, Elving, it's $. Stopped at 95th and Cicero (1.5 miles from station) to record a side on my way home 11/5.

88.9 WAKG Summit (Argo H.S.)-keeping more regular late hours this year-even caught at home after WRRG signoff. Has a variety of rock..only WNTH 88.1 more eclectic among local high schools this fall.

94.7 WYTZ - add to the "FM happenings caused by AM" file..sister WLS 890 had been out-rating them, so dropped the hits and started simucasting the talk?!? May or may not officially be WLS-FM now...was still legally WYTZ after a week of yap and I can't stand them to check, hi.

95.9 WKKD-FM Aurora-is getting strange, almost like they're evolving into an ez listening or even "new age"? Mixes in instrumentals, not accidentally as they promote it, that are often jazz-like or even the etherial "new age".

Side note = Almost everyone has mistakenly called the jazz-light ac stations new age, stations like WNUA,KTWV,KKSF,WOCD,WNWV,etc. Far as I know, NO commerical stations in the US play real true "new age" music except maybe for the two-hour syndicated "Musical Star-Streams" program, a commercial version of "Music from the Hearts of Space" on Sunday nights or like time period.

96.7 WLLI Joliet - shifted to familiar album oldies (aka "classic rock") seems like they flip-flopped satellite feeds with 105.5?

98.7 WFMT - has been moving towards becoming, at least in part, a "listener sponsored" station. Strange move as they've been relatively profitable as full commerical classical, plus their main rival WNIB already relies on listener contributions and program guide subscriptions to make up for weak ad revenue, and the non-commercial stations that already actively seek listener money are hurting. (Visual - shrug of shoulders and look of bewilderment).

100.3 WPNT - with 94.7's lazy shift, WPNT becomes "the station most likely to change" has lost over 2/3's of audience from the ez WLOO days, and is known to be hurting from cash flow.

105.5 WAIT-FM Wodstock - switched to WZSR "Star 105.5", back to satellite medium-to-up AC (via Unistar?)

MARK STRICKERT's comments continue.

Recent out of town news, maybe old by now but just in case... WESE now on 92.5 still ez (oh yeah ex 95.9 Baldwin,MS). 94.9 Holly Springs, MS not heard on. KYMO-FM East Prairie,MO (freq?) (105.3?-gc) heard on, with album oldies. WVUB 91.1 Vincennes, IN has ez listening during the day?!?! WEZW 103.7 Wauwatosa WI still trying to decide if they're ez or soft light ac - have heard blocks of both, and even jazz/ac mix on Sunday morning (trying for former WBZN listeners?). Slogan is "Easy 104" (with soft jingles),strict.

JEFF FALCONER - BOX 63 - CLINTON, ONTARIO N0M 1L0

Equipment: Magnum Dynalab FT-101A, Probe 9 at 27' with rotor, RG-11u feed, Magnum Dynalab 205 preamp.

AUGUST 1991 DX

25 Tr

0519 WRMM 101.3 NY Rochester,rm$ Warm 101.3 198
0523 WVAZ 102.7 IL Oak Park,rm$, V103 335
0612 WUSN 99.5 IL Chicago, k$ 335
0633 WEFM 95.9 IN Michigan City, b$, We-FM, tough in shallow CFPL null 311
1207 unID 96.7 rm$, The all new Hot 96 Licks FM
1238 WLYY 101.7 MI Lansing,ro$, Y-102 159

OCTOBER 1991

16 GW

1825{CJXY} 95.3 ON Hamilton,op$, Y-95 ex CKDS 90

NOVEMBER 1991

8 Au: Aindex 35/Kindex 6

2156 WSHW 99.7 IN Frankfort, ro, ID 345

9 Au: Aindex 101/Kindex 8!

0325 WZOK 97.5 IN Rockford,r, ZOK 400
0400 WASH 97.1 DC Washington,m,ID 394

16 MS

1532 KKYK 103.7 AR Little Rock, "...in Little Rocks'....center..." 848

17 Tr/TrS

0230 unID 93.5 ?? rp$, The Voice
0249 WBCM 93.5 MI Boyne City,k$, BCM 333
1131 WLS 94.7 IL Chicago, t$ 333
1138 WLTQ 97.3 WI Milwaukee, Lite 97 324
1140 WUSN 99.5 IL Chicago,k$, US99 333

Nov. 17 DX continued

1142 {WPNT}100.3 IL Chicago, r$, The Point, ex WXEZ 333
1151 WVAZ 102.7 IL Oak Park, ads, V103$ very strong q 335
1154 WJMK 104.3 IL Chicago,m$, Magic 333
1159 WMRI 106.9 IN Marion,ID, ABC nx$ 330
1213 WFMT 98.7 IL Chicago, c$ 333
1214 WLUP 97.9 IL Chicago,r$, Loop 333
1313 WNSN 101.5 IN South Bend, ads$ Sunny 101.5 277
1316 WDOR 93.9 WI Sturgeon Bay, Packers Football game 307
1323 WWKI 100.5 IN Kokomo, k$, Hit Country 100.5 321

18 TrS

2154 WCZY 104.3 MI Mount Pleasant, $ end of Pistons Basketball game into b music 165

22 TrS: * means the Probe 9 was phased into a log periodic antenna.

2151 WMSH 99.3* MI Sturgis,r$, CJBC4 phased, ID 239
2252 {WKMF}101.7* MI Tuscola,k$, ID, ex WGMZ, CKNX phased 109

23 TrS

1305 WVCC101.7* PA Linesville, bigband$ ID CKNX phased out 158

24 MS

0424 KKYK 103.7 AR Little Rock, "...in Little Rock..." 848

A very intense aurora on November 8/9 reduced the band to hash. The Northern Lights put on a dandy display here. Threw together a crude phasing setup and have achieved encouraging results. I use a 13 element log periodic antenna and the Probe 9 fed into a Magnum Dynalab Signal Slueth amplifier. The attenuator and tuning controls on the Signal Sleuth are then set for the best null on the offending signal. Reminds me of some of the phasing setups I have used for medium wave DX over the years. 73 Jeff

dBRUCE HALL - 5 STIRTON AVE. BRANTFORD, ONTARIO CANADA N3T 1E2

Equipment: see Bruce's previous report appearing this month.

NOVEMBER 1991 DX

1 Tr

0800 WTRV 94.3 MI Leland, ro // WAIR 92.5 "Northern Michigan's Super Station", km 506

5 MS

0732 WPUB 94.3 SC Camden,r, calls, mention of Columbia, SC weather 989

6 MS

0728 KAMO 94.3 AR Rogers, k, K-Mo 94 FM 1408
0801 WIFX 94.3 KY Jenkins, r, 94IFX 609
2200 WJCF 88.3 NH Nashua, calls. E-skip on TV, tried FM, and got my 33th state, but E-skip did not reach the FM. 692

BRUCE'S COMMENTS ARE ON THE NEXT PAGE.

NOVEMBER 1991 DX

8 Tr

0755 WKSD 99.7 OH Paulding, Kiss 99.7, r km 499

9 MS

0730 WAPW 99.7 GA Atlanta, rs, Power 99, lcl car ad, Highway 138, ph# request line 741-0097 spoke to Paul to confirm ad. 500th catch!! 1104

10 GW

0905 {WGRF} 96.9 NY Buffalo, 97 Rock, r, "WGRF Buffalo, 97 Rock", ex: WGR-FM 115

18 MS

0705 KFGO 101.9 ND Fargo, Magic 102 KF.... 34th state
0717 WHHY 101.9 AL Montgomery, Y102 1311

BRUCE HALL's comments.

Spent 7 hours monitoring different open frequencies for MS during Leonids shower. Major disappointment as far as number of bursts per hour. Snagged ND though; new state. I hope getting Geminids shower December 14 will produce more loggings. Other than MS, not much to report. Must be the time of year. Thanks to Sam Brown, UPI, caught some E-skip activity on TV. Thanks to Greg for helping to ID WLBT TV 3 Jackson, MS. Es didn't reach my FM dial! $#%@!^#! Hope others are getting their share of DX. Happy New Year! 73dB
(Bruce also sent along a brochure on a new museum forthcoming in Brantford called "icomm", that will demonstrate various communication technology-gc)

Bill Nienajadly Po Box 2999 Clifton NJ 07015-2999

November 23 Tropo to upper Hudson Valley

1700 WRAV 94.5 NY Ravena ID----------110
1714 WQKZ 98.5 NY Catskill ID strong 110
1719 WKBE 100.5 NY Warrensburg ID weak! 174
1731 WENU 101.7 NY Hudson Falls ID,strong173
1733 WSSV 101.3 NY Stillwater ID--------161
1735 WKLI 100.9 NY Albany ID finally!---142
1743 WDST 100.1 NY Woodstock
1747 Albany FM's way up & strong!

Four new stations in a half hour, not bad for a small trop opening like this. Just before checking the conditions, I replaced my filter line up to 180-180-110-110-110 and this helped on my 100.9 which had some problems with the 180-180-150-150-150 set up. Since I don't expect any real good openings (except December MS & ES)... I'm going to concentrate on the Tropscatter mode, on frequencies like 100.9, 95.3. Goodxing! Bill

Also, thanks to both Bruce Elving and John Ebeling for setting me straight on my Minnesota UNIDs. Thanks to Harry Hayes who also set set me straight on my WEBZ 99.3 question which did indeed turn out my WEBZ was WEBZ 99.3 Mexico Beach FL as he logged it too at the exact same time that I did. One other thing, WPRB 103.3 Princeton did increase their power and possibly their tower height, which Joe Fela says WPRB is supposedly on the WNJT-52 tower now. WPRB is heard here now a lot better now and could give me problems on E-Skip or tropo. I received a brochure on Andy Bolin's phase box, in it he goes into complete detail on the phase box and phasing in general, I found it really interesting. Im seriously considering getting a phase box. Goodxing!

GREG CONIGLIO - 5100 GLENWOOD DR. - WILLIAMSVILLE, NEW YORK 14221

Equipment: Carver TX11 tuner modified with 150 khz filters, Stereo Probe 9 mounted on roof, CAC-11 and RG6 coax, Archer-rotor, rabbit ears with dials used with RS 0-10-20 db amp for phasing.

OCTOBER 1991 DX

18 Tr

1124 CITE 107.3 PQ Montreal, French m$ 308
1130 CJFM 95.9 PQ Montreal, r$, new song by Genesis. 308
1129 W285AD 104.9 NY Watertown, translator of WMHR 102.9 Syracuse, weak sig, g 153
2229 (CKLW) 93.9 ON Winsdor, c$, ex CKMR

29 Tr

0000 CBON 104.9 ON Gogama, FF mono 370
CJQM 104.3 ON Sault Ste. Marie, k$ 363
CBCE 97.5 ON Little Current, CBC 259
0010 WHSB 107.7 MI Alpena, over local 274
(WGLD)105.1 MI Cheboygan, classic 105.1, ex: WGFM and WQLZ 343

WERZ 107.1 FM
WMYF am 1540

NOVEMBER 1991 DX

8 Au

1700 WVXU 91.7 OH Cincinnati, ID in car radio, only 2nd time heard via Au, and both times heard in car. Last time was in 1989, driving on Aurora Ave. (seriously!). Strongest Au I have heard, with possible exception of 3/13/89, but not many stations were readable. Nice visual display too.

9 Au

0000 WRDR 104.9 NJ Egg Harbor City, strong and unusually clear, big band music 330

28 TrS (DXing in Rochester, New York), ≈ 1800

CITE 107.3 PQ Montreal, French over WRCK, m$ 254
WHLM 106.5 PA Bloomsburg, several over WYRK 160
CING 107.9 ON Burlington, rs$, Dance 108 heard over WRHP 112

WIRQ 94.3 was not noted on the air. None of the area CPs were noted on the air either.

This has been a horrendous season for trops. Other than the two mediocre openings in October noted above, there has been next to no activity. September was completely lacking in any real opening. This is the exact opposite of last year, in which there were multiple 600+ mile openings. I have heard of several out of season Es openings, caught only one early in November, but the MUF was only channel 5. Thanks Bob Seybold and dBruce Hall for phone calls alerting me to that opening. Thanks to Mike Cherry, and Dave Nieman for sending logos. I received the convention video tape from Tom Bryant recently: just like last year Tom did an excellent job. And thanks to all who have contributed to Northern FM DX during 1991, by reporting, or sending in logos or special reports. I hope to hear from all of you more in 1992, and lets hear from some new people too!

:SOUTHERN·FM DX:

JANUARY 1992

Danny Buntin
1312 N. Skyline
Stillwater, OK 74075

DEADLINE: 14th

SOUTHERN FM DX IS FOR REPORTERS FROM: AL, AR, AZ, CA, CO, DE, FL, GA, HI, KS, KY, LA, MD MO, MS, NC, NM, NV, OK, SC, TN, TX, UT and also DC. Happy DXing in '92 and report soon!

REPORTS ON THE NOV. 8th AURORA AND SUBSEQUENT ES ARRIVE.

SAN ANTONIO REPORTS IN.

Doug Allen, w2crs, P. O. Box 5646, Woodland Park, CO 80866
Equipt.: Onkyo T-4087 and various Pioneer tuners(all IF modified), FM-13 at 50 feet.

11/8 Au
1700 WNIN 88.3 IN Evansville, ID
1730 ???? 96.9 by turning antenna 5 different stations all mushy.
1800 KCEV 88.3 KS Wichita, new cl
1900 KJTY 88.1 KS Topeka, ID
2042 KZBQ 93.7 ID Pocatello, ID
2106 WPRE 94.3 WI Prairie de Chien, ID
2110 WXLP 96.9 IL Moline, 97-X
2131 KFMH 99.7 IA Muscatine, ID & "Iowa City"
2136 KKEZ 94.5 IA Fort Dodge, ID
2145 KHAK 98.1 IA Cedar Rapids, ID

11/9 Es
1735 KILT 94.5 TX Harlington, ads
1737 WKEU 97.7 GA Griffin, "Cool FM"
1745 XHAAA 93.1 MX Reynosa, SS
1746 KGNZ 88.1 TX Abilene, ID
1749 KKMJ 95.5 TX Austin, ID and "Magic 95.5"
1754 KVMV 96.9 TX McAllen, g
1756 KMBHt 88.9 TX Harlington,local events

11/9 Es
1759 KBNR 88.3 TX Brownsvile, ID
1801 XHNOEt91.3 TA Nueva Laredo, SS
1802 ??? 97.1 ? SS
1804 WJIZ 96.3 GA Albany, ID
1806 KOYEt 94.9 TX Laredo, Y-95
1807 KHER 94.3 TX Crystal City, SS then "KH-FM" in EE
1811 WQLTt107.3 AL Florence, 107-Q
1813 ??? 103.1 MS? mention of "Golden Triangle"
1815 WWUN 101.7 MS Clarksdale, ID
1817 WALX 100.9 AL Selma, ID & "Laser 101"
1822 WSYA 103.3 AL Montgomery, "Sunny 103"
1840 WTYY 95.5 AL Dothan, ads
1853 WABB 97.5 AL Mobile, ID
1855 WKSJ 94.9 AL Mobile, k,"95 KSJ"
1900 WJST 94.5 FL Port St.Joe,"rel ad for WJOE"
1907 KPOW? 98.7 ? "K-POW" ID
1915 WTYL 97.7 MS Tylertown, ID, "1290 AM"
1920 WXLT 94.1 MS McComb, "Sunny 94.1"
1934 WINK? 96.9 FL garbled ID & "sun coast giant", double hop?

The band was loaded with aurora signals the evening of the 8th, but very difficult to copy any thing as several signals were competing on every open frequency and audio was very mushy, typical of auroral signals. I worked about 20 states on 144 mHz during the same period. The Es of the next day followed excellent 50 mHz F-skip to South America, New Zealand, Australia, and Japan, the latter three new for me on six meters.

A friend in Silver Lake, KS, Greg Cerny, has been DXing a lot recently. He has test equipment at work and offered to test and compare the Murata and Toko 150 kHx IF filters. I sent him 10 of mine, plus he already had quite a number of Murata and Toko filters. He says there's no comparison. The Murata filters have less insertion loss, a flatter bandwith, steeper slopes, and are much closer to 10.7 mHz. Whereas almost all Murata filters are within 10 kHz of the 10.7 mHz specification, many Toko filters are 10 to 30 kHz of. From now on, I'm sticking to the Mratas! Greg also built up two 5 filter "super-duper IF amplifiers" described by Tim McVey in his "Technical Topics" Nov. 1990 VUD. Greg reports dramatic adjacent channel selectivity using one of them in his tuner. He sent me the other circuit board which I will install and report on next month. Belated Season Greetings, and a Happy New Year to all!

Keith D. Pugh, 227 Martin St., New Hope, AL 35760
Equipt.: McIntosh MR-78, Probe 9, RG-6 coax

10/17 trs
1258 WHTK 99.7 SC Port Royal, ID 350

11/1 ms
1250 KAWL 104.9 NE York, ID, prev. Es

tr
1251 WPKY 104.9 KY Princeton, r, ID
1253 WKYW 104.9 KY Frankfort, lc. ad
1255 WKHG 104.9 KY Leitchfield, ID

ms
1924 WKRY 93.5 FL Key West, prev. Es

11/6 trs
2152 WKLR 93.1 IN Indianapolis, o,ID 360

11/7 trs
2247 WFAE 90.7 NC Charlotte, c, ID 300

11/8 au (with Onkyo tuner)
1811 tune in, 30 db to 107.9, noise!
1838 KHHT 98.7 MO Springfield, 22db
1846 KWMU 90.7 MO St. Louis, prev. tr,7db
1853 KGOR 99.9 NE Omaha, prev. Es, 14db
1920 25 db noise again, total f/out 1928

11/9 Es
1910 KSPK 102.3 CO Walsenburg, k, ID
1918 KSLV 95.3 CO Monte Vista,"V-95.3"
1921 KRTZ 98.7 CO Cortrez, k, ads
1922 KWQX 101.3 CO Durango, r, ID
1930 KRSJ 100.5 CO Cortez, ads
1932 KRTN 94.3 NM Raton, nx
1941 KRWN 92.9 NM Farmington

cont.....

11/9 Es
1959 KWYK 94.9 NM Aztec, r, ID
2004 KQNM 93.7 NM Gallop, "KQ-93"
2008 KNYN 95.5 NM Santa Fe, k, ID
2013 KMGN 93.9 AZ Flagstaff, ID
2016 KAFF 92.9 AZ Flagstaff, k, ID
2031 KUNM 89.9 NM Albuquerque
11/10 gw-tr (recent new FMs)
1700 WERQ 104.5 TN Knoxville, Q-104,$ 160
1800 WGOG 96.3 SC Walhalla, ID 180
1825 WJBZ 96.3 TN Seymore, g, $,ID 170
11/27 tr
1300 WINL 98.5 AL Linden,k,Win-98,$ 162
1308 WRXR 96.3 SC Aiken,rp(rare) 316
11/17 tr
1402 WPEG 97.9 NC Concord, s, ID 320
11/27 tr
2332 KBFC 93.5 AR Forest City,ID 260
11/28 tr
1101 KLSA 90.7 LA Alexandria, ID 425
1105 WGRM 93.9 MS Greenwood, r, ID 250
12/2 Es
1547 WOW 94.1 NE Omaha, "wow FM"
1548 KEZO 92.3 NE Omaha, Z-92
1551 KNEN 94.7 NE Norfolk
1553 KLZU?93.5 ?? k,$
1558 KTIN 92.1 MO Trenton, k, ID 540
1604 KRCS 93.1 SD Sturgis, k, ID

The au on 11/8 was much less audible than the very workable event in Mar. '89. At times this au was solid noise with no voice detected. Things got better as the au weakened, but was unable to ID much. The Onkyo T-9090 works better on au than the MR-78. In super narrow, the MR-78 has a hard time with the already distorted au, but you can always switch to narrow,and it well work just fine. It's just that the Onkyo is a bit more selective than the MR-78's narrow mode. Thanks to all who helped with unIDs over the past year. 73s.

Pat Dyer WA5IYX, 5315 Silvertip Dr., 78228-2744

June 1991 (CST)

2: (Es)
0800 WVPN 88.5 WV Charleston
1200 KLQZ 92.7 MO Eldon
1202 KDMG 103.3 IA Pella

3: (Es)
0726 WMHK 89.7 SC Columbia
0727 WHLZ 92.5 SC Manning
0731 WAAS 93.5 SC Columbia
0738 WKOO 98.7 NC Jacksonville
0746 WMXF- 96.5 NC Laurinburg
0747 WKML 95.7 NC Lumberton
0749 WAPW 99.7 GA Atlanta
0751 WZFX 99.1 NC Whiteville
0754 WPCH 94.9 GA Atlanta
0834 WFDD 88.5 NC Winston-Salem
0841 WNCW 88.7 NC Spindale
0859 WPMW 92.7 WV Mullens
0914 WHUB- 98.5 TN Cookeville
0919 WWLV 94.5 FL Daytona Beach
0924 WWKA 92.3 FL Orlando
0928 WHTQ 96.5 FL Orlando
0932 KHYS 98.5 TX Port Arthur (tr)
0953 WPAP 92.5 FL Panama City
0957 WQIK 99.1 FL Jacksonville
1001 WFSY 98.5 FL Panama City
1252 WTLG 88.3 FL Starke
1259 WJFR 88.7 FL Jacksonville
1315 WMNF 88.5 FL Tampa
1402 WNCM 88.1 FL Jacksonville
1406 WGMK 106.3 GA Donaldsonville
1408 WLYU 92.5 GA Lyons
1409 WVOH- 93.5 GA Hazlehurst
1411 WKXH 104.3 GA Alma
1412 WNCT-107.9 NC Greenville
1419 WHTK 99.7 SC Port Royal
1425 WXTC 96.9 SC Charleston
1428 WRNS 95.1 NC Kinston
1435 WTDR 96.9 NC Statesville
1436 WKSI 98.7 NC Greensboro
1440 WVBS- 99.9 NC Burgaw
1443 WWMY 94.5 NC Eden
1447 WZMQ 103.9 FL Key Largo
1456 WQSM 98.1 NC Fayetteville
1457 WCMQ- 92.3 FL Hialeah
1504 WGUF 92.7 FL Marco
1517 WLVE 93.9 FL Miami Beach
1520 WNHW 92.5 NC Nags Head
1523 WZTA 94.9 FL Miami Beach
1527 WRMF 97.7 FL Palm Beach
1533 WKPX 88.5 FL Sunrise
1554 WKTC 96.9 NC Goldsboro
1617 WLHN 97.9 IN Anderson
2149 KYGO 98.5 CO Denver
2151 KTAK 93.9 WY Riverton
2153 KLZY 92.5 WY Powell

5: (Es)
1025 TG-- 88.5 Gua
1026 TG 88.1 Gua Guatemala City

6: (Es)
1759 KGNU 88.5 CO Boulder
1805 KTDB 89.7 NM Ramah
1809 KLZY 92.5 WY Powell
1820 KBPI 105.9 CO Denver
1833 KMGW 94.5 WY Capser
1835 KJYE 92.3 CO Grand Junction
1836 KDHT 92.5 CO Greeley
1855 KHOW- 95.7 CO Denver
1908 KKFM 96.5 CO Colorado Spgs
1911 KMTS 92.7 CO Glenwood Spgs
1914 KYCS 95.1 WY Rock Springs
1919 KRAI- 93.7 CO Craig
1933 KQSW 96.5 WY Rock Springs
2000 KSMT 102.3 CO Breckenridge
KRYT 107.9 CO Pueblo
2016 KRLN-103.9 CO Canon City
2020 KIMN 107.9 CO Fort Collins
2052 KCGY 95.1 WY Laramie

7: (Es)
0923 KRXT 98.5 TX Rockdale (tr)
0928 WRJA- 88.1 SC Sumter
1205 WMCU 89.7 FL Miami

9: (Es)
1815 WGNV 88.5 WI Milladore

12: (Es)
0612 KLZY 92.5 WY Powell
0618 KSBT 96.7 CO Steamboat Spgs
0619 KRDO- 95.1 CO Colorado Spgs

June 12: (Es)

0620	KPBI	105.9	CO	Denver
0621	KILO	93.9	CO	Colorado Spgs
0622	KSMT	102.3	CO	Breckenridge
0623	KRYT	107.9	CO	Pueblo
0629	K203AT	88.5	CO	Westcliffe
0630	KSPK	102.3	CO	Walsenburg
0640	KPRN	89.5	CO	Grand Junction
0652	KQIX	93.1	CO	Grand Junction
0655	KEKB	99.9	CO	Grand Junction
0658	KJYE	92.3	CO	Grand Junction
0701	KCIC	88.5	CO	Grand Junction
0742	KZIQ-	92.7	CA	Ridgecrest
0830	KKFR	92.3	AZ	Glendale
0831	KDKB	93.3	AZ	Mesa
0832	KOOL-	94.5	AZ	Phoenix
0835	KMEO-	96.9	AZ	Phoenix
	WEOW	92.5	FL	Key West
0839	KTEP	88.5	TX	El Paso
0843	XHRM	92.5	BCN	Tijuana
	KJOK	93.1	AZ	Yuma
0844	KTTI	95.1	AZ	Yuma
0845	KQEZ	103.9	AZ	Coolidge
	XHNI	105.1	SON	Nogales
0851	DUG	108.8	AZ	Douglas
0926	KRCY	105.9	AZ	Kingman

(06-12-91:) (Es)

0929	KFSD	94.1	CA	San Diego
0936	KMLE	107.9	AZ	Chandler
	KKLQ-	106.5	CA	San Diego
0940	KZLA	93.9	CA	Los Angeles
	KTWV	94.7	CA	Los Angeles
0942	KBBY	95.1	CA	Ventura
0944	KPWR	105.9	CA	Los Angeles
0947	KCMJ-	92.7	CA	Indio
0949	KQYN	95.7	CA	29 Palms
0951	KJLH	102.3	CA	Compton
0952	KACE	103.9	CA	Inglewood
0953	KKGO	105.1	CA	Los Angeles
0956	KCDZ-	107.7	CA	29 Palms
0958	KWVE	107.9	CA	San Clemente
1000	KKBT	92.3	CA	Los Angeles
1001	KGB	101.5	CA	San Diego
	KCHV	93.7	CA	Coachella
1009	KGMX	105.3	CA	Lancaster
1011	KJUL	104.3	NV	North Las Vegas
1014	KEYV	93.1	NV	Las Vegas
1017	KLOS	95.5	CA	Los Angeles
1019	KXEZ	98.7	CA	Los Angeles
1021	KVWM-	93.5	AZ	Show Low
1023	KPLM	106.1	CA	Palm Springs
1027	KRLV	106.5	NV	Las Vegas
1030	KFRG	95.1	CA	San Bernardino
1035	KLOA-	104.9	CA	Ridgecrest
1040	KIGZ-	97.9	CO	Cortez
1042	KAHM	102.1	AZ	Prescott
1045	KZEZ	93.5	UT	St. George
1052	KWNR	95.5	NV	Henderson
1055	KPAH	92.7	NV	Tonopah
1127	KCEP	88.1	NV	Las Vegas
1515	WCMQ-	92.3	FL	Hialeah
1524	WXDJ	95.7	FL	Homestead
1534	WMCU	89.7	FL	Miami
1550	WKIS	99.9	FL	Boca Raton
1554	WLVE	93.9	FL	Miami Beach
1555	WZTA	94.9	FL	Miami Beach
	WLYF	101.5	FL	Miami
1557	WRGI	93.5	FL	Naples
1558	WCVU	94.5	FL	Naples
1600	WAXY	105.9	FL	Fort Lauderdale
1604	WKRY	93.5	FL	Key West
1606	WPOW	96.5	FL	Miami

13: (Es)

0956	WMNF	88.5	FL	Tampa
1022	WTTS	92.3	IN	Bloomington
1049	KUBO	88.7	CA	Calexico
1054	KCHV	93.7	CA	Coachella
1058	KKBT	92.3	CA	Los Angeles
1059	KACE	103.9	CA	Inglewood
	KKGO	105.1	CA	Los Angeles
1100	KLOS	95.5	CA	Los Angeles
1102	KODJ	93.1	CA	Los Angeles
1103	KWVE	107.9	CA	San Clemente
1105	KZLA	93.9	CA	Los Angeles
1106	KOLA	99.9	CA	San Bernardino

(13:)

1110	XHRM	92.5	BCN	Tijuana
	KAVS	97.7	CA	Mojave
1112	KMLE	107.9	AZ	Chandler
1113	KPWR	105.9	CA	Los Angeles
1122	KOOL-	94.5	AZ	Phoenix
	KRMX	94.9	CA	San Diego
	KGMX	105.3	CA	Lancaster
1132	KZIQ-	92.7	CA	Ridgecrest
1141	KLOA-	104.9	CA	Ridgecrest
1148	KRAI-	93.7	CO	Craig
1156	WIAA	88.7	MI	Interlochen
1157	KEYV	93.1	NV	Las Vegas
1200	KFSI	88.5	MN	Rochester
1204	WERN	88.7	WI	Madison
1209	XHMMF	92.3	BCN	Mexicali
1218	KFOX	93.5	CA	Redondo Beach
	KNJO	92.7	CA	Thousand Oaks
1230	WCRC	95.7	IL	Effingham
1234	KPAH	92.7	NV	Tonopah
1238	KRZE-	97.3	CA	Ontario
1259	WLAB	88.3	IN	Fort Wayne
1303	WLLZ	98.7	MI	Detroit
1316	WHMI-	93.5	MI	Howell
1318	WTGV	97.7	MI	Sandusky
1323	WZOW	97.7	IN	Goshen
1329	WLQI	97.7	IN	Rensselaer
1332	WVIC-	94.9	MI	Lansing
1337	WJFM	93.7	MI	Grand Rapids
1405	WLDY-	92.7	WI	Ladysmith
1412	WAQE	97.7	WI	Rice Lake
1413	KCZY	92.7	IA	Osage
1414	KDAL-	95.7	MN	Duluth
1454	WGNV	88.5	WI	Milladore
1627	KLJC	88.5	MO	Kanasas City (ms)
1737	KEZJ	95.7	ID	Twin Falls
1739	KCPX	98.7	UT	Salt Lake City
1805	KXAZ	93.5	AZ	Page
1810	KZEZ	93.5	UT	St. George
1821	KCEP	88.1	NV	Las Vegas
1829	WMMZ	93.7	FL	Ocala
1830	WWLV	94.5	FL	Daytona Beach
1832	WHTQ	96.5	FL	Orlando
1833	WMMO	98.9	FL	Orlando
1836	WWKA	92.3	FL	Orlando
1845	WOCL	105.9	FL	De Land
1852	WRMF	97.9	FL	Palm Beach
1853	WKTK	98.5	FL	Crystal River
1854	WOMX-	105.1	FL	Orlando
1855	KXEZ	98.7	CA	Los Angeles
1859	WZTU	104.1	FL	Cocoa Beach
1900	WIRK	107.9	FL	West Palm Beach
1901	WMLO	104.9	FL	Havana
1903	WYUU	92.5	FL	Safety Harbor
1910	WCVU	94.5	FL	Naples
1911	WBGF	93.5	FL	Belle Glade
1914	WLRQ-	99.3	FL	Cocoa
1919	WLVE	93.9	FL	Miami Beach
1922	WMTX-	95.7	FL	Clearwater

(6-13-91:) (Es)

1929	WCKT	107.1	FL	Lehigh Acres
1933	WEOW	92.5	FL	Key West
1937	WSRZ	106.3	FL	Sarasota
1945	WZMQ-	103.9	FL	Key Largo
1951	WOVV	95.5	FL	Fort Pierce
1953	WINK-	96.9	FL	Fort Myers
1955	WKIS	99.9	FL	Boca Raton

14:

0927	KSBR	88.5	CA	Mission Viejo
0939	XHRM	92.5	BCN	Tijuana
0940	KKBT	92.3	CA	Los Angeles
0946	KZLA	93.9	CA	Los Angeles
0951	KPWR	105.9	CA	Los Angeles
0959	KFOX	95.3	CA	Redondo Beach
1023	KSDS	88.3	CA	San Diego
1026	XETRA-	91.1	BCN	Tijuana
1052	KZIQ-	92.7	CA	Ridgecrest
1108	KGMX	106.3	CA	Lancaster
1112	KAVS	97.7	CA	Mojave
1124	KLOS	95.5	CA	Los Angeles
	KTWV	94.7	CA	Los Angeles
1128	KQYN	95.7	CA	29 Palms
1131	KCMJ-	92.7	CA	Indio
	KBIG	104.3	CA	Los Angeles
1137	KBBY	95.1	CA	Ventura
1139	KMGQ	106.3	CA	Goleta
	KPLM	106.1	CA	Palm Springs
1142	KRZE-	93.5	ON	Ontario
1156	KSKQ-	97.9	CA	Long Beach
1200	KLON	88.1	CA	Long Beach
1225	XHMMF	92.3	BCN	Mexicali
1252	KDHT	92.5	CO	Greeley (ms)

24: (Es)

1650	KTYD	99.9	CA	Santa Barbara
1657	KLOS	95.5	CA	Los Angeles
	XHMMF	92.3	BCN	Mexicali
1658	KYXY	96.5	CA	San Diego
1659	KXEZ	98.7	CA	Los Angeles
1700	KFOX	93.5	CA	Redondo Beach
1703	KLON	88.1	CA	Long Beach
1713	XHSOL	89.9	CA	Mexicali
1716	KFMB-	100.7	CA	San Diego
1718	XHRM	92.5	BCN	Tijuana
1720	KRMX	94.9	CA	San Diego
	KSDS	88.3	CA	San Diego
1722	KKLQ-	106.5	CA	San Diego
1733	KJOY	103.7	CA	San Diego
2137	KKBT	92.3	CA	Los Angeles

25: (Es)

0759	WESC-	92.5	SC	Greenville
	WGWG	88.3	NC	Boiling Springs
0800	WKRR	92.3	NC	Asheboro
0809	WKOO	98.7	NC	Jacksonville
0812	KPLE	104.3	TX	Temple (tr)
0829	WJDJ	93.9	KY	Burnside
0837	WLAP-	94.5	KY	Lexington
0841	WJIE	88.5	KY	Okolona
(25:)				
0955	KMCM	92.5	MT	Miles City
1037	KLZY	92.5	WY	Powell

29: (Es)

0841	WWKA	92.3	FL	Orlando
0847	WHTQ	96.5	FL	Orlando
0848	WLVE	93.9	FL	Miami Beach
0855	WMNF	88.5	FL	Tampa
0915	WAIA	93.3	GA	St. Marys
0917	WFHT	101.5	FL	Quincy
0919	WOKF	92.5	GA	Folkston
0920	WHJX	101.5	GA	Brunswick
0927	WHCJ	88.5	GA	Savannah
1059	WLPT	88.3	GA	Jesup
1104	WKCL	91.5	SC	Ladson
1113	WHLZ	92.5	SC	Manning
1242	KSDS	88.3	CA	San Diego
1259	WAIR	92.5	MI	Atlanta
1302	WIAA	88.7	MI	Interlochen
1305	WGVU	88.5	MI	Allendale
1307	KALA	88.5	IA	Davenport
1327	WOZZ	93.5	WI	New London
1335	WJPD-	92.3	MI	Ishpeming
1559	WGCA	88.5	IL	Quincy (ms)
1628	WAMU	88.5	DC	Washington
1700	WLLZ	98.7	MI	Detroit
1702	WMXD	92.3	MI	Detroit
1754	WBNH	88.5	IL	Pekin
1759	WONU	89.7	IL	Kankakee
1857	WDCO-	89.7	GA	Cochran
1859	WFCH	88.5	SC	Charleston

30: (Es)

2122	KCEP	88.1	NV	Las Vegas

July 1991 (CST)

1: (Es)

0739	KOEL-	92.3	IA	Oelwein
0740	WLDY	92.7	WI	Ladysmith
0743	KJJY-	92.5	IA	Ankeny
0746	KFSI	88.5	MN	Rochester
0749	WBEZ	91.5	IL	Chicago
0804	KMSU	89.7	MN	Mankato
0809	KDDR-	92.3	ND	Oakes
0826	KPLO-	94.5	SD	Reliance
0833	KKOK	95.7	MN	Morris
0836	KLDZ	95.1	NE	Lincoln
0838	KBYZ	96.5	ND	Bismarck
0842	KELO-	92.5	SD	Sioux Falls
0843	KSQY	95.1	SD	Deadwood
0909	KAML-	96.9	WY	Gillette
0913	KCGY	95.1	WY	Laramie
0917	KQLT	103.7	WY	Casper
0923	KBPI	105.9	CO	Denver
0930	KFBQ	97.9	WY	Cheyenne
0931	KYCS	95.1	WY	Rock Springs
0936	KMGW	94.5	WY	Casper
0944	KJYE	92.3	CO	Grand Junction
0948	KRAI-	93.7	CO	Craig

5: (Es)

0740	WUAW	88.3	NC	Erwin
0741	WKSU	89.7	OH	Kent
0742	WJPD-	92.3	MI	Ishpeming
0746	WCOL-	92.3	OH	Columbus
0759	WYSU	88.5	OH	Youngstown
0808	WGNV	88.5	WI	Milladore

8: (Es)

1010	WJPD-	92.3	MI	Ishpeming
1012	WIAA	88.7	MI	Interlochen
1035	WZTR	95.7	WI	Milwaukee
1036	WLHT	95.7	MI	Grand Rapids
1038	WKHQ-	105.9	MI	Charlevoix
1045	WLTO	103.9	MI	Harbor Springs
1047	WGFM	105.1	MI	Cheboygan
1049	WYSY	107.9	IL	Aurora
1059	WDUX-	92.7	WI	Waupaca

1101	WDEK	92.5	IL	De Kalb
1103	WFMT	98.7	IL	Chicago
	WUPS	98.5	MI	Houghton Lake
1104	WOLX	94.9	WI	Baraboo
1110	WDOR-	93.9	WI	Sturgeon Bay
1114	WYCA	92.3	IN	Hammond
1116	WAPL	105.7	WI	Appleton
1119	WGGN	97.7	OH	Castalia
1120	WATZ	99.3	MI	Alpena
	WAUN	92.7	WI	Kewaunee
1123	WNBY-	93.5	MI	Newberry
1126	WUPQ	97.9	MI	Newberry
1130	WVIC-	94.9	MI	East Lansing
1139	WGRD-	97.9	MI	Grand Rapids
1141	WFBE	95.1	MI	Flint
1147	WSTD	96.9	MI	Standish
1152	WDZZ	92.7	MI	Flint
1155	WRIZ	106.3	MI	Lakeview
1156	WQLR	106.5	MI	Kalamazoo
1157	WOOD-	105.7	MI	Grand Rapids
1159	WUGN	99.7	MI	Midland
1221	WGVU	88.5	MI	Allendale
1344	WBWI	92.5	WI	West Bend
1459	WCPE	89.7	NC	Raleigh

10: (Es)

0929	WKPX	88.5	FL	Sunrise

12: (tr)

1326	XHSRO-	92.5	NL	Monterrey

17: (Es)

1129	WFCH	88.5	SC	Charleston

18: (Es)

0152	WRVL	88.3	VA	Lynchburg
0449	KESD-	88.3	SD	Brookings
0741	WGCA	88.5	IL	Quincy
0805	WGVU	88.5	MI	Allendale
0826	KDCR	88.5	IA	Sioux Center
0830	WBNH	88.5	IL	Pekin
	WCBR-	92.7	IL	Arlington Hts
0900	KEYA	88.5	ND	Belcourt
0906	KTWA	92.7	IA	Ottumwa
0912	KOEL-	92.3	IA	Oelwein
0947	WLDY-	92.7	WI	Ladysmith
1050	KLZY	92.5	WY	Powell
1621	WYUU	92.5	FL	Safety Harbor
1622	WMMO	98.9	FL	Orlando
1623	WMTX-	95.7	FL	Clearwater
1624	WXTB	97.9	FL	Clearwater
	WZTU	104.1	FL	Cocoa Beach
1626	WMMZ	93.7	FL	Ocala
1629	WMNF	88.5	FL	Tampa
1630	WJCT-	89.9	FL	Jacksonville
	WUSF	89.7	FL	Tampa
1638	WQPW	95.7	GA	Valdosta
1641	WEOW	92.5	FL	Key West
1643	WJST-	94.5	FL	Port St. Joe
1646	WNFI	99.9	FL	Palatka
	WTBB	97.7	FL	Bonifay
1647	WBGM	98.9	FL	Talahasssee
1654	WMKO	94.9	GA	Millen
	WINK-	96.9	FL	Fort Myers
1657	WRGI	93.5	FL	Naples
1658	WCVU	94.5	FL	Naples
1700	WSGL	103.1	FL	Naples
1703	WUSA-	100.7	FL	Tampa
1707	WOVV	95.5	FL	Fort Pierce
1712	WFLZ	93.3	FL	Tampa

1716	WRMF	97.9	FL	Palm Beach
1718	WWKA	92.3	FL	Orlando
1722	WGNE-	98.1	FL	Titusville
1728	WKQL	96.9	FL	Jacksonville
1729	WAPE	95.1	FL	Jacksonville
1732	WPAP	92.5	FL	Panama City
1737	WBYZ	94.5	GA	Baxley
1743	WFFM	105.7	GA	Ashburn
1747	WQZY	95.9	GA	Dublin
1749	WKKZ	92.7	GA	Dublin
1752	WLWI	92.3	AL	Montgomery
1753	WIXV	95.5	GA	Savannah
1754	WIJY	107.9	SC	Hilton Head Is
1759	WFXH	106.1	SC	Hilton Head Is
1804	WJCL-	96.5	GA	Savannah
1819	TTOI	108.9	AL	Troy
1820	WTQR	104.1	NC	Winston-Salem
1823	WCGQ	107.3	GA	Columbus
1826	WHLZ	92.5	SC	Manning
1828	WMCG	104.9	GA	Milan
1830	WESC-	92.5	SC	Greenville
1844	WRDX	106.5	NC	Salisbury
2000	WOKF	92.5	GA	Folkston
	WFSY	98.5	FL	Panama City
2001	WGLF	104.1	FL	Talahassee

19: (Es)

0751	KZLA	93.9	CA	Los Angeles
0753	KSBR	88.5	CA	Mission Viejo
0803	KPWR	105.9	CA	Los Angeles
0805	KKBT	92.3	CA	Los Angeles
0815	KPFK	90.7	CA	Los Angeles
0950	XHMMF	92.3	BCN	Mexicali
0951	XETRA	91.1	BCN	Tijuana
0957	XHRM	92.5	BCN	Tijuana
1058	WYSU	88.5	OH	Youngstown
1059	WOSU	89.7	OH	Columbus
1547	WLAB	88.3	IN	Fort Wayne
1550	WRNS	95.1	NC	Kinston
1605	WMUU-	94.5	SC	Greenville
1618	WKRR	92.3	NC	Asheboro
1624	WXBQ	96.9	TN	Bristol
	WTFM	98.5	TN	Johnson City
1627	WPVR	94.9	VA	Roanoke
1628	WVPN	88.5	WV	Charleston
1630	KOEL-	92.3	IA	Oelwein
1634	WTDR	96.9	NC	Statesville
	WPEG	97.9	NC	Concord
1641	KISD	98.7	MN	Pipestone
1644	KLSS	106.1	IA	Mason City
1646	WRKR	92.5	KY	Owensboro
1649	WRRR-	93.9	WV	St. Marys
1651	WKOO	98.7	NC	Jacksonville
1652	WTLC	105.7	IN	Indianapolis
1653	WLBC-	104.1	IN	Muncie
1656	WDJQ	92.5	OH	Alliance
1657	WXXP	97.9	IN	Anderson
1700	WAKO	103.1	IL	Lawrenceville
1711	WUPS	98.5	MI	Houghton Lake
1714	WOOD-	105.7	MI	Grand Rapids
1715	WAIR	92.5	MI	Atlanta
1716	WWJY	103.9	IN	Crown Point
1717	WYCA	92.3	IN	Hammond
	WVIC-	94.9	MI	East Lansing
1718	WLHT	95.7	MI	Grand Rapids
1719	WTRO-	101.5	WI	Madison
1720	WART	103.9	IL	Dundee
1722	WNHW	92.5	NC	Nags Head
1725	WKIO	92.5	IL	Urbana
1729	KQRS-	92.5	MN	Golden Valley

July 19: (Es)

1738	WPAY	104.1	OH	Portsmouth
1746	CHTZ	97.7	ON	St. Catherines
1749	WBWI	92.5	WI	West Bend
1757	WMYG	96.9	PA	Braddock

24: (Es)

0700	WKPX	88.5	FL	Sunrise
0701	WCMQ-	92.3	FL	Hialeah
0708	WLVE	93.9	FL	Miami Beach
0712	WBGF	93.5	FL	Belle Glade

25: (Es)

0848	WCMQ-	92.3	FL	Hialeah
0850	WKPX	88.5	FL	Sunrise
0858	WMTX-	95.7	FL	Clearwater
0901	WMNF	88.5	FL	Tampa

29: (Es)

2159	KCRB	88.5	MN	Bemidji

31: (Es)

1538	WFCH	88.5	SC	Charleston
1559	WMHK	89.7	SC	Columbia
1605	WKOU	98.7	NC	Jacksonville
1607	WCMQ-	92.3	FL	Hialeah
	WKML	95.7	NC	Lumberton
1609	WRNS	95.1	NC	Kinston
1613	WKTC	96.9	NC	Goldsboro
1622	WNHW	92.5	NC	Nags Head
1635	WLAP-	94.5	KY	Louisville
1638	WKRR	92.3	NC	Asheboro
1649	WCOL-	92.3	OH	Columbus
1659	WZRQ	96.5	OH	Hamilton
	WHRZ	97.7	KY	Providence
	WMMG-	93.5	KY	Brandenburg
1701	WIKY-	104.1	IN	Evansville
1705	WCBL-	102.3	KY	Benton
1706	WZKS	103.9	KY	Louisville
1711	WOFX	94.9	OH	Fairfield
1721	WJIE	88.5	KY	Okolona
1820	WTTS	92.3	IN	Bloomington
1953	XHRM	92.5	BCN	Tijuana

August 1991 (CST)

1: (Es)

0822	WHWC	88.3	WI	Menomonie
0830	KBEM	88.5	MN	Minneapolis

2: (Es)

1920	KLOS	95.5	CA	Los Angeles
1921	KBIG	104.3	CA	Los Angeles
1923	KKBT	92.3	CA	Los Angeles
1925	KCLB-	93.7	CA	Coachella
1928	KTWV	94.7	CA	Los Angeles
1931	KFOX	93.5	CA	Redondo Beach
1936	KSDR	88.5	CA	Mission Viejo
1944	XHMMF	92.3	BCN	Mexicali
1949	XHJC	91.5	BCN	Mexicali
1951	XHRM	92.5	BCN	Tijuana
1955	KRMX	94.9	CA	San Diego

7: (Es)

0846	XHRM	92.5	BCN	Tijuana
0848	KFOX	93.5	CA	Redondo Beach
0849	KPWR	105.9	CA	Los Angeles
0853	XETRA-	91.1	BCN	Tijuana
0854	KZLA	93.9	CA	Los Angeles
0857	KKBT	92.3	CA	Los Angeles
0904	KLOS	95.5	CA	Los Angeles
0905	KSBR	88.5	CA	Mission Viejo
0910	KOTR	94.9	CA	Cambria
0912	KDDB	92.5	CA	Paso Robles
0913	KAVS	97.7	CA	Mojave
0915	KXXZ	95.3	CA	Barstow
0919	KZIQ-	92.7	CA	Ridgecrest
1100	RB I	88.9	Bze	Belize City
1224	KSOY	95.1	SD	Deadwood
1233	KRCS	93.1	SD	Sturgis
1247	KGFX-	92.7	SD	Pierre
1250	KQDY	94.5	ND	Bismarck
	KBYZ	96.5	ND	Bismarck
1251	KBRB-	92.7	NE	Ainsworth
1424	KSCR-	93.5	MN	Benson
1437	KRKZ	93.5	OK	Altus

11: (Es)

1654	WSSX	95.1	SC	Charleston
1659	WFCH	88.5	SC	Charleston
	WDCO-	89.7	GA	Cochran
1713	WKQL	96.9	FL	Jacksonville
1820	WEOW	92.5	FL	Key West
1900	WMCU	89.7	FL	Miami
1955	CMHW	93.5	Cub	Santa Clara

12: (Es)

1830	WCLQ	89.5	WI	Wausau
1839	WOLX	94.9	WI	Baraboo
1925	KQRS-	92.5	MN	Golden Valley
1927	KJJY-	92.5	IA	Ankeny

13: (Es)

1419	WJNR	101.5	MI	Iron Mountain
1423	WJPD-	92.3	MI	Ishpeming
1559	WCNV	88.5	WI	Milladore

23: (Es)

1455	WVPN	88.5	WV	Charleston
1459	WZAC-	92.5	WV	Danville
1500	WBTQ	93.5	WV	Buckhannon
1504	WFGM	97.9	WV	Fairmont
1505	WVSC-	97.7	PA	Somerset
1507	WCMI-	92.7	KY	Catlettsburg
1508	WDSY	107.9	PA	Pittsburgh
1511	WXIL	95.1	WV	Parkersburg
1513	WPAY-	104.1	OH	Portsmouth
1514	WKQS	96.5	PA	Johnstown
	WKDD	96.5	OH	Akron
1515	WNCI	97.9	OH	Columbus
1518	WNCX	98.5	OH	Cleveland
1519	WOVK	98.7	WV	Wheeling
1520	WWSW-	94.5	PA	Pittsburgh
1523	WCEZ	107.9	OH	Delaware
1527	WTTS	92.3	IN	Bloomington
	WAMO	105.9	PA	Pittsburgh
1530	WTPI	107.9	IN	Indianapolis
1531	WVKS	92.5	OH	Toledo
	CKSY	95.1	ON	Chatham
1534	WLBC-	104.1	IN	Muncie
1535	WXKR	94.5	OH	Port Clinton
1538	WOTL	106.3	OH	Ottawa
1540	WCLR	95.7	OH	Fremont
1541	WRJS	98.5	PA	Oil City
1543	WCVO	104.9	OH	Gahanna
1544	WDBA	107.3	PA	Du Bois
1546	WJXQ	106.1	MI	Jackson
1547	WNWN	98.5	MI	Coldwater
1551	WCRZ	107.9	MI	Flint
1554	CKMR	93.9	ON	Windsor
1557	WCRC	95.7	IL	Effingham
1600	WNED	94.5	NY	Buffalo
1601	WTLC	105.7	IN	Indianapolis

Aug. 23 (Es)

1605	CHRE	105.7	ON	St. Catherines
1607	WMGN	98.1	WI	Madison
1612	WAJI	95.1	IN	Fort Wayne
1614	WPRE-	94.3	WI	Prairie du Chien
1612	WZRQ	96.5	OH	Hamilton
1620	WWIZ	103.9	PA	Mercer
1624	WRRR-	93.9	WV	St. Marys
1624	WQMX	94.9	OH	Medina
1625	WBBY	103.9	OH	Westerville
1628	WQAL	104.1	OH	Cleveland
1631	CJBX	92.7	ON	London
1636	WLQR	101.5	OH	Toledo
1641	WCLV	95.5	OH	Cleveland
1652	WKKG	101.5	IN	Columbus
1654	WOFX	94.9	OH	Fairfield
1700	WRKU-	95.1	PA	Grove City
1701	WVNO	106.1	OH	Mansfield
1706	WSWO	102.3	OH	Wilmington
1720	WSHH	99.7	PA	Pittsburgh
1725	WLAP-	94.5	KY	Lexington
1727	WINC-	92.5	VA	Winchester
1729	WEMM	107.9	WV	Wheeling
1742	WTNJ	105.9	WV	Mount Hope
1748	WXCC	96.5	WV	Williamson
1750	WQLA	104.9	TN	La Follette
1751	WKGO	106.1	MD	Cumberland
1759	WQHY	95.5	KY	Prestonsburg
1800	WLIL-	93.5	TN	Lenoir City
1813	WXTR-	104.1	MD	Waldorf
1818	WRVQ	94.5	VA	Richmond
1821	WXIS	103.9	TN	Erwin
1822	WVAF	99.9	WV	Charleston
1825	WRSF	105.7	NC	Columbia
	WFLO-	95.7	VA	Farmville
1829	WTQR	104.1	NC	Winston-Salem
	WLWZ	103.9	SC	Easley
1834	WQSF	96.5	VA	Williamsburg
1835	WTDR	96.9	NC	Statesville
1837	WLGQ	97.9	NC	Gaston
1840	WKHX-	101.5	GA	Marietta
1843	WBT-	107.9	NC	Charlotte
1849	WKRR	92.3	NC	Asheboro
1851	WZLI	106.1	GA	Toccoa
1852	WNND	103.9	NC	Fuquay
1854	WYFL	92.5	NC	Henderson
	WZZU	93.9	NC	Burlington
1900	WLTY	95.7	VA	Norfolk
1902	WXRC	95.7	NC	Hickory
1909	WPEG	97.9	NC	Concord
1916	WRNS	95.1	NC	Kinston
1919	WKTC	96.9	NC	Goldbsoro
1923	WJMX-	103.3	SC	Cheraw
1926	WYAI	104.1	GA	Marietta
1931	WVBS-	99.9	NC	Burgaw
1936	WSSX	95.1	SC	Charleston
1941	WKOO	98.7	NC	Jacksonville
2015	WHLZ	92.5	SC	Manning

25: (Es)

1727	WRJA-	88.1	SC	Sumter
1746	WSSX	95.1	SC	Charleston

27: (Es)

1104	XHGRO-	92.5	NL	Monterey (tr)
1116	TG--	88.5	Gua	
1125	TGFP-	88.1	Gua	Guatemala City
1130	YS--	98.5	ElS	San Salvador
1156	TG--	98.9	Gua	
1200	TGRT-	88.8	Gua	Guatemala City
1204	TG--	94.5	Gua	

Sept 1991

3: (Es)

1949	WAMU	88.5	DC	Washington
2059	WVPN	88.5	WV	Charleston
2122	WZQQ	92.3	KY	Hyden
2131	WXCC	96.5	WV	Williamson
2142	WPFW	89.5	DC	Washington
2159	WKRR	92.3	NC	Asheboro

Oct 1991

1: (Es)

1755	WOZN	98.7	FL	Key West
1756	WEOW	92.5	FL	Key West
1801	WKRY	93.5	FL	Key West
1802	WCMQ-	92.3	FL	Hialeah
	WMCU	89.7	FL	Miami
1817	WGYL	93.5	FL	Vero Beach
1843	WRMF	97.9	FL	Palm Beach
1850	WKPX	88.5	FL	Sunrise
1920	WBGF	93.5	FL	Belle Glade

14: (tr)

0728	WRBH	88.3	LA	New Orleans

18: (tr)

0026	WYNK-	101.5	LA	Baton Rouge
0713	WCKW-	92.3	LA	Laplace
0740	KLSA	90.7	LA	Alexandria
	KLDN	88.9	TX	Lufkin
0747	KGRM	91.5	LA	Grambling
	KDAQ	89.9	LA	Shreveport

20: (Es)

0838	WKPX	88.5	FL	Sunrise
0856	KYKR	93.3	TX	Port Arthur (tr)
0859	WMCU	89.7	FL	Miami
1146	WHCJ	88.5	GA	Savannah
1209	WSSX	95.1	SC	Charleston
1223	WWWZ	93.5	SC	Summerville
1225	WXTC	95.9	SC	Charleston
1229	WFCH	88.5	SC	Charleston

Nov 1991 (CST)

5: (Es)

1426	WFGM	97.9	WV	Fairmont
1428	WZAC-	92.5	WV	Danville
1432	WBES-	94.5	WV	Dunbar
1433	WEMM	107.9	WV	Huntington
1435	WKGO	106.1	MD	Cumberland
1438	WBTQ	93.5	WV	Buckhannon
1439	WXCC	96.5	WV	Williamson
1441	WSIG	96.9	VA	Mt. Jackson
1443	WRVC	93.7	KY	Ashland
1445	WTCR-	103.3	WV	Huntington
1447	WTNJ	105.9	WV	Mt. Hope
1448	WIFX	94.3	KY	Jenkins
1452	WLZT	107.3	WV	Miami
1456	WQPO	100.7	VA	Harrisonburg
1459	WDNE-	99.3	WV	Elkins
1506	WSIP-	98.9	KY	Paintsville
1517	WKCB-	107.1	KY	Hindman
1518	WOBG-	105.7	WV	Salem
1520	WJYP	100.9	WV	S. Charleston
1521	WVAF	99.9	WV	Charleston
	WKLC-	105.1	WV	St. Albans
1522	WJRS	104.9	KY	Jamestown
1527	WAYZ-	101.5	PA	Waynesboro

Nov. cont. next month...

TV TIME TUNNEL

HAPPY NEW YEAR !!!

From your 'Time Tunnel' Editor:
TOM BRYANT
849 TODD PREIS DRIVE
NASHVILLE, TN 37221
615-646-2000

OFF-THE-AIR PICKUPS

WHAT WERE THEY, AND WHY DID THEY EXIST?: Although there probably aren't any 'off-air' pickups used for primary network service today, they were commonplace in rural areas in the 50s and 60s. While the major markets were served by AT&T microwave feeds; stations in smaller locales often could not afford AT&T's rates, or in some cases, AT&T service simply wasn't available. No matter what the situation, the need for live network interconnection had to be met; and construction of a private microwave link was usually the answer.

For this account, I'll rely on memory to relate the story of how the NBC television network originally made it into North Dakota.

WDAY-tv (6) in Fargo was a primary NBC affiliate. For whatever reason, AT&T service was not a viable option, so the WDAY people chose an off-the-air pickup. The first step was a tower about 30 miles from the KSTP-tv (Minneapolis) transmitter. A pair of stacked yagis received the channel 5 signal which was then fed into a microwave transmitter and relayed on to the next tower about 30 miles to the northwest...and so on...until the KSTP-tv signal arrived at the WDAY-tv studios some 200 air miles from Minneapolis.

The next segment of this system was owned by the Meyer Broadcasting Co. of Bismarck which had an off-air receiver about 30 miles west of Fargo, and about 5 microwave hops to the KFYR-tv transmitter site 10 miles east of Bismarck. Meyer later extended the system to KMOT in Minot with an off-air pickup of KFYR-tv...and to KUMV-tv in Williston utilizing an off-air pickup of KMOT.

Considering the circumstances, these privately owned off-air pickups and associated microwave systems were relatively reliable. Although the relay towers were unmanned, a warning system pinpointed trouble spots and an engineer could usually reach any relay tower in less than two hours.

HOW DID THEY WORK?: A monitor in the WDAY-tv master control room was dedicated to the off-air KSTP-tv microwave pickup. The engineer on duty simply watched to see when Minneapolis originations ended, then punched up the circuit to feed the Fargo transmitter.

The Bismarck crews had a more challenging setup. Economics did not allow an additional hop to get a video signal into the studios. Instead, the audio portion of the microwave receiver was fed to the studios over a telephone line to a headset in master control. The master control operator could hear..but not see..the network video source!

Using the clock, an absence of audio on the headset monitor, and intuition; the switch to NBC was made 'flying blind'. If everything down the line was on schedule, viewers were unaware of the quirks of the system. If KSTP was running late, WDAY would hold their ID on screen with no audio until NBC programming began. The guys at KFYR would assume that since they were hearing no Fargo audio..and the clock was correct

(continued - next page)

for a network 'hit'.. often punched up the off-air link only to find a huge WDAY-tv slide staring them in the face..and being transmitted in all its' glory on KFYR-tv!

COLOSSAL BLUNDERS: As you might have speculated, WDAY-tv IDs popped up frequently on KFYR-tv. That, however, wasn't all that went wrong. Every now and then the AT&T link between Chicago and Minneapolis would conk out, and KSTP-tv would display a network trouble slide sporting their call letters. This would catch everyone off guard; and as a result, KSTP would show up on all stations to the west. I should point out that KMOT and KUMV were able to monitor both audio and video from their respective off-air feeds; thus transient ID's (particularly from WDAY-tv) were seldom seen in Minot and Williston.

One weekend in the summer of 1959 I decided to drive up to Minot and Williston to take a look at the KFYR-tv satellite stations (I was employed by KFYR at the time). While in the control room at KUMV, I witnessed one of the most mind-boggling ID displays of all time. KSTP-tv had interrupted an NBC program with a severe weather warning slide (containing their logo) and was about five seconds into a voice-over description of the potential storm hazard when the WDAY crew zapped it with an ID slide of their own. Next came a KFYR-tv ID slide, then one from KMOT; and finally...the guy in Williston punched up a KUMV ID slide. All this happened within a ten second time frame...but it seemed like an eternity. It was quite a sight!

OFF THE AIR?: Perhaps the most unusual occurrence I witnessed with regard to off-air pickup operation took place in the summer of 1957. Without warning, the WDAY-tv transmitter went off the air..and stayed off! That, of course, meant a disruption of NBC service to the three stations west of Fargo. KFYR-tv popped up a trouble slide until the program director showed up with a half-hour travelogue film to kill time. The filler stuff continued for another hour, then we loaded a feature film to really eat up the time. Meanwhile the front office had been in touch with WDAY and learned that their transmitter man had found the trouble, but that they didn't have a spare part on hand. Later in the day WDAY advised us that the faulty component was indeed an odd duck...RCA didn't have a replacement either! As a result, WDAY was off the air for over two days while the elusive part was flown in from Austria!

While filler programming continued to grind through the film projectors in Bismarck, the master control operator noted the presence of NBC audio on his headset. What was going on? A call to the KFYR-tv transmitter engineer verified that there was NBC video on the off-air link; but that it was from WDSM-tv (also on 6) in Duluth.

You guessed it! Tropo conditions were up full blast, and the 250 mile distant WDSM-tv signal was hitting the high gain off-air receiver west of Fargo like a local!

No one had run into a situation like this before...NBC was available via the Duluth signal...but could we carry it? After some frantic calls to the FCC, NBC in New York, and WDSM; we were assured that it would be OK to use the unusual source on an emergency basis as long as the signal strength was adequate.

Well, we went back to NBC via the WDSM signal at the next regular break...and with the exception of a couple of hours (when severe fading occurred) we carried the unorthodox NBC source for the better part of two days. Oddly enough, there never appeared to be any CCI from Duluth on the off-air pickup when WDAY-tv was on.

Eventually the off-air systems gave way to AT&T feeds, which in turn were rendered obsolete by satellite distribution. Although a few regional networks continue to use terrestrial microwave between their affiliates; the days of the off-the-air pickup (with the exception of a few LPTV's) remain only as oddities in the pages of television history.

NEXT MONTH: "Maple Leaf Memories"

FM STATS

FRED NORDQUIST
7945 BOXFORD RD
CLAY, NY 13041
DEADLINE: THE 5TH

UPDATED 12/ 9/91 ALL-TIME FM SCOREBOARD

DXER NAME		DXER LOCATION		TOTAL	88-92	ES	MS	AU	USA	CN	MX	FO	TPU	YB	AS OF:
DYER	PAT	TX SAN ANTONIO		2521	400	2060	65	0	44+	4	21	5	75	70	11/30/91
STROBEL	RALPH	IN MUNCIE		2016	532	654	155	6	43+	7	2	2	55	72	09/28/91
BUNTIN	DANNY	OK STILLWATER		1900	317	1146	4	0	48+	5	9	2	65	74	09/01/90
ELVING	BRUCE	MN DULUTH		1734	317	1365	9	8	47+	4	1	0	53	48	02/07/91
EBELING	JOHN	MN BLOOMINGTON		1674	286	973	46	83	47+	6	5	0	59	52	01/01/91
FELA	JOSEPH	NJ S. PLAINFIELD		1612	335	869	2	9	37+	6	0	3	47	68	10/12/91
BUGAJ	MIKE	CT ENFIELD		1592	217	873	23	23	37+	5	1	2	46	74	11/21/91
PUGH	KEITH	AL NEW HOPE		1590	238	811	44	3	43+	7	10	2	63	83	09/08/90
NORDQUIST	FRED	NY CLAY		1573	319	776	44	59	41+	5	0	3	50	69	12/09/91
NIEMAN	DAVID	NY AKRON		1377	376	417	48	24	43+	8	0	3	55	59	12/23/90
MCCORMACK	FRED	ND FARGO		1339	305	990	3	52	48+	6	3	0	58	74	08/03/90
SEYBOLD	BOB	NY DUNKIRK		1326	212	611	0	2	45	8	3	3	59	58	06/24/90
CONIGLIO	GREG	NY WILLIAMSVILLE		1224	202	624	13	10	37+	8	1	3	50	85	01/01/91
EBELING	JOHN	MN PROSIT		1137	212	763	3	5	48+	9	2	0	60	75	01/01/91
JEFFERSON	JOHN	CA ANTIOCH		1130	250	662	160	0	29	4	5	0	38	74	10/17/90
BRUMFIELD	DAVE	IN RICHMOND		897	165	325	15	0	36	4	2	2	44	81	09/01/91
SMOLAREK	BOB	NJ OLDWICK		890	149	385	2	0	36+	3	0	1	41	78	02/18/91
HOLBROOK	HANK	MD CHEVY CHASE	*	866	224	234	18	0	35+	6	0	3	45	59	10/05/91
MICHALEK	ALAN	MA SPRINGFIELD		812	106	495	0	0	36+	5	0	0	42	52	10/01/90
OETTING	DANIEL	PA EXTON		756	190	250	9	2	34+	6	0	0	41	77	06/07/91
ALLEN	DOUGLAS	CO WOODLAND PARK		711	116	489	44	0	39	4	3	0	46	88	10/30/90
GREENE	GEORGE	OH AKRON		706	54	234	0	0	33+	3	0	0	37	71	03/09/91
ROSS	ROBERT	ON LONDON		682	182	280	0	0	33	6	0	3	42	76	02/11/91
BRUMFIELD	DAVE	IN MUNCIE		682	149	65	1	0	29	1	1	0	31	79	03/01/90
HALL	D. BRUCE	ON BRANTFORD		503	95	10	55	2	34	4	0	1	38	90	12/04/91
NIENAJADLY	BILL	NJ CLIFTON		501	96	169	5	0	34+	2	0	0	37	75	07/11/90
SHAFTON	RICHARD	NJ ROCKAWAY		459	116	142	0	0	30+	3	0	0	34	78	06/29/90
MEADE	LARRY	IL CHICAGO		459	85	65	6	0	23	2	0	0	25	79	09/05/90
NOLLMAN	BILL	CT NORWICH		453	46	155	17	0	31+	9	0	1	35	81	11/24/91
SITTEL	MATT	NC RALEIGH		330	49	58	0	2	16+	1	1	0	19	88	06/09/91
HEPBURN	WILLIAM	ON BRAMPTON		309	183	83	1	6	21	2	0	1	24	85	11/10/91
BRANDENBURG	TODD	AS SILVER LAKE		309	46	32	0	1	24	0	0	0	24	80	09/02/90
MANCUSO	GUS	MD CHEVERLY		259	41	31	0	0	22+	0	0	0	23	70	03/26/91
MANCUSO	GUS	WV BIRCH RIVER		228	20	4	0	0	15	0	0	0	15	87	03/26/91
HAWK	MIKE	NE OMAHA		211	36	4	1	0	9	1	0	0	10	91	08/19/91
RENFREW	JIM	NY ROCHESTER		185	37	2	0	0	6+	2	0	0	20	9	06/15/91
MEADE	LARRY	KY PRICE		165	35	0	14	0	10+	0	0	0	11	79	09/05/90
WESELER	FRANK	PA ERIE		162	23	2	0	0	8	1	0	0	9	64	08/20/90
ONYSCHUK	KEN	IL RIVERDALE		141	30	0	0	0	7	0	0	0	7	68	06/30/91

* VERIFIED.

COLUMN DEFINITIONS: are as follows: Total = Total number of FM stations logged from DXer's location (All loggings should be received within 25 mile radius of this location to count.) Freq. changes count as a station, call letter changes DO NOT count. Also count a station only once regardless if logged by different propagation modes. 88-92 = All stations logged from 88.0 to 91.99 Mhz. Es = Total number of stations logged via E-skip. MS = Total by meteor scatter. Au = Total via Aurora. USA = Total number of states and the "+" = Washington, DC. CN = Number of Canadian provinces logged. MX = Number of Mexican states logged. FO = Number of foreign countries, but not Canada or Mexico. TPU (Total number of political units) = Sum of USA CN MX and FO. YB = The year you began DXing from this location. Other groundrules for computing log totals are included in AUGUST 88 VUD Page 48. Date cutoff: 1989. 73 - Fred

ABOVE STATS REPRESENT MOST NO. OF STATIONS FOR EACH POLITICAL UNIT (PU) LOGGED FROM A SINGLE SPECIFIED DXER'S LOCATION. FIRST AND SECOND PLACE DXERS ARE LISTED ONLY. OTHERS THAT ARE TIED FOR SECOND ARE NOT LISTED....FJN.

Following up on my Oct 91 VUD column concerning requests for printouts of Distances between DXer's location and cities in North & Central America (and Caribbean). I've refined the program to print (on 10 pages) distances (in miles) for 4853 cities in 79 political units, including all locations listed in the WTFDA North American TV Data Base and FM Atlas (Part I Listing) as well as Caribbean countries with TV/FM stations listed in WRTVH. A $2.00 donation to cover costs of mailing and printing will get you your personalized listing. Also include with your request the Great Circle Coordinates of your DX location. 73 - Fred.

STATES STATS
USA

PU	#	DXER	#	DXER	PU	#	DXER	#	DXER	PU	#	DXER	#	DXER
AL	106	KPU-	56	JEB-	LA	72	RSA-	63	BEL2	OH	220	RST-	177	FME-
AK	11	JJE3	0	None	ME	40	RST2	30	KPU-	OK	122	DBU-	51	FNO-
AZ	49	PDY-	36	JJE2	MD	54	JFE-	48	GMA-	OR	31	JPI-	29	FMC2
AR	86	DOD-	61	VEA-	MA	94	RST2	77	MBU-	PA	157	DNI-	133	FNO-
CA	360	JJE2	126	PDY-	MI	156	RST-	139	FME-	RI	14	WWO-	12	RST2
CO	107	DAL-	69	JJE2	MN	169	JEB-	155	JEB2	SC	54	MSI1	53	PDY-
CT	49	MBU-	42	AMI-	MS	78	KPU-	64	TMC-	SD	39	KPU-	35	JJE2
DE	13	DOE-	11	JFE-	MO	118	FME1	84	DBU-	TN	110	KPU-	93	JAY-
FL	152	PDY-	146	DBU-	MT	29	JJE2	25	JPI-	TX	303	PDY-	211	RSA-
GA	102	KPU-	97	PDY-	NE	57	MHA-	50	JJE2	UT	29	PDY-	22	DBU-
HI	0	None	0	None	NV	24	PDY-	24	DBU-	VT	14	KPU-	13	AMI-
ID	28	DBU-	26	PDY-	NH	27	RST2	17	AMI-	VA	61	MSI1	60	JFE-
IL	198	FME1	196	RST-	NJ	75	JFE-	69	RSM-	WA	46	FMC2	30	JJE2
IN	180	RST-	132	DBR-	NM	45	JJE2	44	KPU-	WV	39	RST-	33	FME-
IA	120	RBR-	102	JEB-	NY	209	FNO-	172	DNI-	WI	136	BEL2	120	JEB-
KS	89	DBU-	78	TBR-	NC	117	MSI1	79	PDY-	WY	26	RST-	25	PDY-
KY	101	RST-	69	DBR-	ND	34	FMC-	34	FMC2	DC	13	GMA-	13	DNI-

CANADA/MEXICO/FOREIGN STATS

PU	#	-DXER	#	-DXER	PU	#	-DXER	#	-DXER	PU	#	-DXER	#	-DXER
CANADA					MEXICO (CONT)					MEXICO (CONT)				
AB	28	-JEB2	26	-JJE2	CHI	8	-FME1	6	-FMC-	SLP	2	-TMC-	0	-None
BC	20	-JJE2	11	-JEB2	CHP	3	-PDY-	0	-None	SON	4	-PDY-	3	-JJE2
MB	15	-FMC-	13	-FMC2	COA	8	-FME1	6	-PDY-	TAB	2	-TMC-	2	-PDY-
NB	9	-FME1	6	-RST-	DF	21	-TMC-	21	-JPI-	TAM	8	-PDY-	6	-KPU-
NF	13	-FNO-	12	-DNI-	DUR	1	-PDY-	0	-None	VCZ	9	-JPI-	6	-KPU-
NS	15	-FME1	9	-KPU-	GRO	5	-PDY-	1	-JPI-	YUC	2	-JPI-	2	-PDY-
ON	114	-DNI-	80	-FNO-	GTO	9	-JPI-	2	-TMC-					
PEI	2	-JFE-	2	-RST-	HGO	1	-JPI-	0	-None	FOREIGN				
PQ	28	-FME1	26	-DNI-	JAL	12	-TMC-	10	-PDY-	CUBA	6	-RST-	5	-FME1
SK	9	-JJE2	8	-FME1	MEX	3	-JPI-	3	-PDY-	BELIZ	3	-PDY-	1	-JPI-
NWT	1	-WHE2	1	-JEB2	MIC	3	-JPI-	1	-PDY-	BERMU	3	-DNI-	2	-FNO-
					MOR	5	-PDY-	3	-JPI-	EL SA	4	-PDY-	1	-KSI-
MEXICO					NL	16	-PDY-	14	-KPU-	GUATE	12	-PDY-	4	-KSI-
AGU	1	-JPI-	0	-None	OAX	1	-JPI-	1	-PDY-	HONDU	2	-KSI-	2	-PDY-
BCN	14	-PDY-	10	-FMC-	NAY	1	-PDY-	0	-None	JAMAI	14	-KPU-	3	-JPI-
BCS	1	-PDY-	0	-None	PUE	5	-PDY-	4	-TMC-	PUERT	4	-KSI-	1	-DNI-
CAM	1	-JPI-	0	-None	SIN	2	-JJE2	1	-DBU-	D.REP	1	-KSI-	0	-None
										BAHAM	1	-FNO-	1	-WWO-

KEY TO DXER INITIALS/LOCATION

AMI-	ALAN	MICHALEK	MA SPRINGFIELD
BEL2	BRUCE	ELVING	MN DULUTH
DAL-	DOUG	ALLEN	CO WOODLAND PARK
DBR-	DAVE	BRUMFIELD	IN MUNCIE/RICHMOND
DBU-	DANNY	BUNTIN	OK STILLWATER
DNI-	DAVID	NIEMAN	NY AKRON
DOD-	DAVID	ODELL	AR LITTLE ROCK
DOE-	DANIEL	OETTING	PA BROOMALL
FMC-	FRED	MCCORMACK	ND DES LACS
FMC2	FRED	MCCORMACK	ND FARGO
FME-	FRANK	MERRILL	MI MILAN
FME1	FRANK	MERRILL	IL MACOMB
FNO-	FRED	NORDQUIST	NY CLAY
GMA-	GUS	MANCUSO	MD CHEVERLY
JAY-	JIM	AYERS	TN MURFREESBORO
JEB-	JOHN	EBELING	MN BLOOMINGTON
JEB2	JOHN	EBELING	MN PROSIT
JFE-	JOSEPH	FELA	NJ S PLAINFIELD
JJE2	JOHN	JEFFERSON	CA PLEASANTON/ANTIOCH
JJE3	JOHN	JEFFERSON	AK ANCHORAGE
JPI-	JIM	PIZZI	WA LOVINGTON
JPI1	JIM	PIZZI	CA ORCUTT
KPU-	KEITH	PUGH	AL NEW HOPE
LME-	LARRY	MEADE	IL CHICAGO
MBU-	MIKE	BUGAJ	CT ENFIELD
MHA-	MIKE	HAWK	NE OMAHA
MSI-	MATT	SITTEL	TN KINGSPORT
MSI1	MATT	SITTEL	NC RALEIGH
PDY-	PAT	DYER	TX SAN ANTONIO
RBR-	ROGER	BROWN	IA AMES
RSA-	RICK	SAMFORD	TX BURNETT
RSC-	ROBERT	SCHWEITZER	NJ E BRUNSWICK
RSM-	ROBERT	SMOLAREK	NJ OLDWICK
RST-	RALPH	STROBEL	IN MUNCIE
RST2	RICHARD	STEINBERGER	MA HUDSON
SCH-	SAUL	CHERNOS	ON BURNT RIVER
SWE-	STEVE	WEST	PA HAVERTOWN
TBR-	TODD	BRANDENBURG	KS SILVER LAKE
TMC-	TIM	MCVEY	TN BOLIVAR
VEA-	VERNON	EATON	AR BENTON
WWO-	WILLIAM	NOLLMAN	CT GLASTONBURY
WHE2	WILLIAM	HEPBURN	NT CORAL HARBOR

ABOUT OUR COVER...Thanks to VUD PHOTO NEWS' editor Dave Nieman for the great cartoon on this month's issue...kudos also to the following DXers for contributing to recent VUD covers: Troy Mimms and NorSat Services (OCTOBER 1991 V.U.D.) Mike Cherry, Vancouver BC, via NORTHERN FM's Greg Coniglio (NOVEMBER 1991 V.U.D.). Some additional layout work was provided by Bob Twomey and Bill Thompson. Also...upcoming V.U.D. covers will feature material from the extensive coverage map collection of FCC FM NEWS' editor Bruce Elving!

Recently, Eric Voytko kindly sent this list to my ETVDX column. I felt this list is of great help in possibly IDing some DX catches. So I am submitting this list courtesy of Eric to the VUD. One note though, John Combs of Tallahassee Florida said not all stations carrying Channel America run it all the time. Some might only carry CHA for only a few hours a night or so, still hopefully this can be of use to all of you-Bill Nienajadly

CHANNEL AMERICA LPTVS AND FULL POWER STATIONS AS OF OCTOBER 2,1991

By ERIC VOYTKO

The good people at Channel America were kind enough to send me a current station listing. I have re-organized them from NSI ranking to State and City of License

ARIZONA

K25DM	Phoenix

CALIFORNIA

K66CY	Arroyo Grande
KKAK-61	Bakersfield
K67DY	Chico
K38CW	Palmdale
KAGL-30	San Bernardino

COLORADO

K38DF	Aurora

FLORIDA

W42AM	Daytona
W07BR	Fort Meyers
W09BS	Naples
W69AX	Perry
W35AJ	St.Petersburg
W09BI	Tallahassee

GEORGIA

WNGM-34	Athens
W67BE	Augusta
WSST-55	Cordele
W35BB	Dublin
W67CI	Roswell
W55AW	Savannah

ILLINOIS

W30AL	Plano
K45AJ	Rockford

INDIANA

W07CL	Auburn
W52AZ	Evansville

IOWA

K39AS	Marshalltown

KANSAS

K06KZ	Junction City

KENTUCKY

W07BY	Morehead
W10BM	Morehead
W02BP	Mt.Sterling
W06BC	Mt. Sterling
W46BE	Murray

LOUISIANA

W47DW	Alexandria
WGMB	Baton Rouge
K13VG	Jennings
K62DW	Lafayette
W61AZ	New Orleans

MAINE

W57AP	Portland

MARYLAND

W52AX	Leonardtown

MASSACHUSETTS

WMFP-62	Lawrence

MICHIGAN

W26AB	Detroit
W40AK	Norton Shores

MINNESOTA

K13UT	Minneapolis

MISSISSIPPI

W20AD	Philadelphia
W11BU	Webb

MISSOURI

K35CO	Cameron
K02NQ	Columbia
K07TV	St.Louis

NEBRASKA

K67CV	Lincoln

NEW YORK

W58AV	Buffalo
W08CJ	Glen Falls
W15AS	Oneata
W40AG	Rochester
W14AE	Syracuse

NORTH CAROLINA

WAAP-16	Burlington
W34AX	Henderson
W53AD	Lenoir
W68BK	Raleigh
W20AT	Roanoke Rapids
W10BZ	Wilmington

OHIO

W29AI	Akron
W59BP	Ashland
W25AI	Cincinnati
W56CA	Delaware
W48AP	Toledo

OKLAHOMA

K28DE	Broken Bow
W07TX	Oklahoma City
W27AK	Ponca City

OREGON

K38CP	Medford

PENNSYLVANIA

W47AO	Berwick
W40AF	Dillsburg
W08CC	Hammonton
W35AO	Hazelton
W63AU	Pittsburgh
W09BI	Williamsport

TENNESSEE

W18AN	Harrogate
W12BU	Heiskell
W27AN	Murfreesboro

TEXAS

K07UD	Corpus Christi
K50AO	Corpus Christi
KJLF-65	El Paso
K54CB	Mt.Pleasant
K67DW	San Antonio

UTAH

K55DL	St.George

VIRGINIA

W51BH	Gloucester
W68BI	Norfolk

WASHINGTON

KCWT-27	Wenatchee

WEST VIRGINIA

W55AT	Huntington

WISCONSIN

WHKE-55	Kenosha
W43AV	Waukesha

— 82 TOTAL —

INDEX BY TOPIC

VUD TECHNICAL INDEX 1979-91

ANTENNAS

008 YAGI ANTENNA FOR VIDEO SIGNALS BELOW CH. A2 - Thompson, 38 Dec 79 (1)
027 SIMPLE MAST REINFORCEMENT - Thompson, 17 Jun 81 (1)
031 UNDERSTANDING FM ANTENNA SPECS - Thompson, 32 Jly 81 (1)
038 LOOPS, EARS, AND DX - Grant, 22 Dec 81 (1)
4 — 044 MODIFYING THE FINCO P-7 PARABOLIC DISH - West, 24 May 82 (2); 52 Oct 82 (2)
045 STAGGER STACKING ANTENNAS - Thompson, 24 Jun 82 (5)
practical information on stacking 2 or more arrays for more gain
051 THE HOVERMAN ANTENNA (for UHF TV) - Thompson, 58 Sep 82 (2)
059 EXPERIMENTS WITH A HOMEBREW YAGI ANTENNA - Thompson, 26 Mar 83 (1); 30 Apr 83 (1); 39 Jan 84 (1)
094 DX'ing WITH INDOOR ANTENNAS - Manucci, 28 Jun 87 (2)
2 — 114 A BETTER UHF DISH FEED? - Thompson, 20 May 89 (2)
123 A HOMEBREW ANTENNA FOR VIDEO SIGNALS BELOW 54 MHz - Prosee, 32 Apr 90 (2)
XXX See Also "ANTENNA NEWS" column...

EQUIPMENT REVIEWS

005 BEARCAT SCANNERS (Models 210 & 250) - O'Connor, 6 Sep 79 (3)
018 AKAI AT-V04 FM TUNER - Sawatzky, 46 Oct 80 (6)
022 DIGITREX ELECTRONICS PA-19 PREAMP - Wilson, 23 Mar 81 (1)
032 RADIO SHACK #15-1134 UHF PREAMP - Thompson, 45 Aug 81 (1)
029 JERROLD STO-82, "THE BEST UHF BALUN" - Thompson, 31 Jun 81 (1)
042 YAMAHA T-2 FM TUNER - DeFilippo, 42 Mar 82 (3)
047 BLONDER-TONGUE UHF TV PREAMPS - Thompson, 22 Jly 82 (1)
048 MAGNUM #2001 CAR FM PREAMP - Thompson, 37 Jly 82 (1)
050 RAYSON "HI-PERFORMER II" UHF PREAMP - Thompson, 54 Aug 82 (2)
060 CARVER TX-11 FM TUNER - Thompson, 30 Jun 83 (3); 56 Aug 83 (2)
062 DX ANTENNA UHF TV PREAMP - Pizzi, 12 Aug 83 (3)
071 CHANNEL MASTER PROBE NINE FM ANTENNA - Thompson, 25 Sep 84 (1)
076 ALLIANCE HD-73 ROTOR - Wertman, 45 Sep 85 (1)
078 CHANNEL MASTER 7206 HI-Q TUNABLE UHF TRAP - Wertman, 40 Dec 85 (1)
079 ONKYO T-9090 FM TUNER - Buntin, 5 May 86 (2)
080 TEKNIKA 6510 UHF TV TUNER - Wertman, 32 May 86 (2); - Thompson, 42 Jun 86 (2)
096 ANTENNA NEWS - Wertman, 71 Sep 87 (1)
about the Channel Master 9520 rotor
100 SOME ANSWERS: BEST GEAR FOR TV & FM - Walczak, 39 Nov 87 (1)
105 1988: LEAP YEAR FOR FM TUNER PERFORMANCE - staff, 38 May 88 (1)
1 — 130 A USER's REVIEW OF THE ICOM R-7000 - Mims, 34 Jan 91 (1)

F_2 PROPAGATION

004 ALL ABOUT F2 SKIP - Thompson, 8 Aug 79 (5); 8 Oct 79 (3)
006 HOME-BREW CONVERTER FOR F2 TV DX - Pulice, 8 Sep 79 (3)
009 SUPER SIMPLE SYSTEM FOR BBC VIDEO - Goldman, 7 Jan 80 (1)
015 TRANSATLANTIC F2 TV DX TIPS - Pulice, 40 Aug 80 (3)
034 MORE F2 TV DX? - Thompson, 46 Sep 81 (1)
109 F2 SKIP...GET READY - Stock, 42 Oct 88 (1)
111 TIPS FOR F2 TV DX'ing - Turcsany, 43 Dec 88 (1)
XXX See Also RECEPTION REPORTS...

FM SCA (Subsidiary Communications Authorization)

001 SCA: RADIO THE FCC DOESN'T WANT YOU TO OWN - Elving, 25 Jly 77 (5); 13 May 84 (1) notes on installing SCA decoders
065 SCA PAGING - Elving, 28 Nov 83 (2)
XXX See Also "TECHNICAL TOPICS" column...

INTERNATIONAL BROADCASTING

3 — 012 DX AROUND THE WORLD - Taylor, 22 Jun 80 (3)
the author describes FM in Egypt, S. Africa, Hong Kong, & China
017 FM AND TV IN FIVE EUROPEAN CITIES - Stroebel, 12 Oct 80 (3)
the author visits Vienna, Salzburg, Paris, London, & Edinburgh
028 A LOOK AT EUROPEAN TV TEST PATTERNS - Thompson, 28 Jun 81 (2); - Luman, 44 Oct 81 (2)
1 — 056 FM IN ARGENTINA - Thompson, 32 Nov 82 (1)
3 — 058 REPORT FROM THE CARIBBEAN - Hauser, 24 Mar 83 (3)
081 CUBAN TV TEST PATTERNS - Nieman, 22 Aug 86 (1)
1 — 095 INTERNATIONAL DX - 70 Sep 87 (1) transatlantic skip in Holland
1 — 097 TRANSATLANTIC E-SKIP: SOME OBSERVATIONS - Emerson, 16 Oct 87 (1)
2 — 115 PRECISION FREQ. OFFSETS OF EUROPEAN LOWBAND VHF TV - Onken, 18 Jun 89 (2)
120 TELEVISION IN SOCIALIST CUBA - Anderson, 36 Dec 89 (1)
124 VIDEO CARRIER FREQ. LIST (AUSTRALIA & NEW ZEALAND) - Kadet, 34 Apr 90 (2)
2 — 134 FM OPERATIONS IN THE CARIBBEAN - Renfrew, 8 Aug 91 (2)

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METEOR SCATTER PROPAGATION

024 THE PHYSICS OF METEOR SCATTER - Fahber, 8 Apr 81 (5); 36 Mar 82 (6)
good intro to MS theory, equipment, when and where to look, etc.
043 METEOR SCATTER INSIGHTS - Fahber, 5 Apr 82 (1)
forecast of MS activity; false CCI patterns during MS bursts
049 METEOR SCATTER INSIGHTS - Fahber, 52Aug 82 (2)
M. burst communications; why reception is limited; dates of showers
054 METEOR SCATTER INSIGHTS - Fahber, 28 Nov 82 (1)
about knots and swarms; forecasts of MS activity
075 IN SEARCH OF A METEOR SCATTER BEACON - Owen, 28 Jly 85 (3)
measurement of peaks and bursts in meteor showers
090 METEOR SCATTER INSIGHTS - Fahber, 42 Dec 86 (1)

MISCELLANEOUS TECHNICAL TOPICS

007 USING THE 6m BAND AS A DX BAROMETER - Thompson, 47 Nov 79 (1)
010 OVERLOAD FILTERS FOR CAR FM - Weeks, 7 Feb 80 (3); 32 Dec 80 (2)
6 — 011 NPR'S SATELLITE INTERCONNECTION SYSTEM - Monti, 28 Apr 82 (3); 6 Apr 80 (3)
013 AURORAL DX TIPS - Thompson, 25 Jun 80 (1)
014 F(50,90) INVENTED - Elving, 40 Jly 80 (2)
whether or not to expect DX based on station coverage contours
021 CANADIAN CONTINUOUS MARINE BROADCASTS - Hepburn, 20 Mar 81 (3)
025 CHOOSING A PREAMP FOR UHF TV DX - Thompson, 30 Apr 81 (2)
039 A LOOK AT THE FM BAND (via a spectrum analyzer) - Monti, 26 Dec 81 (1)
2 — 046 FINDING BEARINGS AND HEADINGS - Wilson, 32 Jun 82 (2)
061 WEATHER SYSTEMS AND TROPO DX - Pearlingi, 38 Jly 83 (1)
063 VHF POLICE/UTILITY FREQUENCY TABLE - Blevins, 8 Sep 83 (2)
066 General information on UHF PREAMPS - Thompson, 31 Nov 83 (1); 26 Feb 84 (1)
067 TUNE IN ON STS-9 (Space Shuttle Communications) - Van Horn, 32 Nov 83 (1)
4 — 068 MEL WILSON ON E-SKIP - Wilson, 37 May 84 (2); 32 Jun 84 (2) [reprint]
2 — 069 USE A COMPUTER TO MEASURE YOUR DX DISTANCES - Combs, 40 Aug 84 (2)
3 — 070 A DX DISTANCE & BEARING PROGRAM - Fuss, 22 Sep 84 (2); 50 Oct 84 (1)
101 AMATEUR RADIO TV - Stone, 2 May 86 (2); 3 Feb 88 (2)
103 IT'S MAY...TIME FOR E-SKIP DX!! - 33 May 88 (1)
a quick description of what to look for; basic skip tutorial
104 OBSERVING PATCHES OF SPORADIC-E IONIZATION - Fahber, 34 May 88 (2)
how to see noctilucent clouds, etc.
106 WEATHERADIO CANADA - Hepburn, 5 Jun 88 (2)
list of weatheradio stations with power, calls, freq, etc.
112 CANADIAN COAST GUARD CONTINUOUS MARINE BROADCASTS - Hepburn, 41 Mar 89 (3)
113 SPECIAL REPORT: GIANT MARCH SOLAR FLARE - Zimmerman, 3 Apr 89 (1)
1 — 119 2500-mile TROPO FROM CA TO HI - reported by Remington, 46 Nov 89 (1)
3 — 125 IONOSPHERIC PROPAGATION: NEW OPINIONS - Prosee, 32 Jun 90 (3)
126 DIGITAL RADIO: THE SOUND OF THE FUTURE - Rosenberg, 66 Sep 90 (2)
127 GUIDELINES FOR BETTER UHF RESULTS - McCarthy, 51 Oct 90 (1)
128 WHEN DOES IT HAPPEN? A SHORT LESSON ON E-SKIP - Nienajadly, 8 Dec 90 (1)
129 WINTER FM DX'ING - Allen, 30 Jan 91 (3)
135 USING YOUR SCANNER FOR EARLY DETECTION OF E-SKIP - Nienajadly, 54 Aug 91 (1)

PHOTOGRAPHING AND TAPING DX

016 PHOTOGRAPHING DX USING A SIMPLE CAMERA - Kramer, 48 Sep 80 (2)
019 HOW TO TAPE (audio) DX - Elving, 30 Dec 80 (2)
020 TV DX PHOTO TIPS - Weeks, 33 Feb 81 (1)
040 VIDEO TAPE YOUR DX - Grant, 25 Jan 82 (1)
118 YET ANOTHER WAY OF TAPING THAT DX - Merrill, 54 Oct 89 (1)

PIRATE BROADCASTING

030 CLOSE ENCOUNTER WITH AN FM PIRATE - Strobel, 4 Jly 81 (2)
033 EUROPEAN FM PIRATES - Thompson, 5 Sep 81 (1)
XXX See also RECEPTION REPORTS...

REGULATIONS, LAWS, AND STANDARDS

003 EDUCATIONAL FM UPDATE - Dorner, 12 Jun 79 (3); 5 Jly 79 (2)
laws, power limits, etc. for stations in the 88-92 band
036 WTFDA OFFICIAL CLUB STANDARDS - 41 Oct 81 (1); reprinted 46 Jly 87 (1)
guidelines for computing DX distance records and totals
052 DIRECT BROADCAST SATELLITE REGULATIONS - Fahber, 4 Oct 82 (5)
057 FCC LPTV STANDARDS - Fahber, in TV NEWS, 8 Nov 81 (2); 7 Feb 83
089 ADVANCED TV SYSTEMS COMMITTEE BROADCAST DEMO (for HDTV) - Monti, 7 Dec 86 (2)
091 ANARC UPDATE - Sprachman, 22 Jan 87 (3)
the Electronic Communications Privacy Act; the legality of DX'ing, etc.
107 PROPOSAL TO REALLOCATE THE 120m & 90m SW BANDS, AND 225-230 MHz TO
BROADCASTING IN THE US & CAN. - Bueneman, 36 May 88 (2); Grant, 8 Jun 88 (3)

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RECEIVER DESIGN AND MODS

002 AGC AND HOW IT AFFECTS TV DX - Thompson, 8 Jun 79 (3)
064 THE NONIMPORTANCE OF CAPTURE RATIO IN FM DX - Elving, 20 Oct 83 (2)
105 1988: LEAP YEAR FOR FM TUNER PERFORMANCE - staff, 38 May 88 (1)
9 — 121 MODIFY YOUR RADIO FOR BETTER SELECTIVITY - Nienajadly, 34 Jan 90 (1); 4 Apr 90 (1); 33 Jan 91 (1); Bugaj, 24 Feb 90 (2); Buntin, 16 Mar 90 (1); Nollman, 25 Feb 90 (1); 52 Oct 91 (2)
122 SELECTIVITY MODIFICATION PROMISES MORE FM DX - Elving, 10 Apr 90 (3)

TELEVISION

023 WILL LPTV FILL THE BANDS WITH CCI? - Thompson, 6 Apr 81 (3)
026 NEW KID IN TOWN - Fahber, 11 Jun 81 (3)
all about low power television (LPTV), regs & technical standards
035 UHF TV PROBLEMS - Fahber, in TV NEWS, 5 Oct 81 (2)
037 THE VERTICAL BLANKING INTERVAL - Fahber, in TV NEWS, 4 Dec 81 (1)
053 STV STATION LIST - Sullivan, 48 Oct 82 (4)
the basics of scrambling; TV stations using those techniques
055 STV UPDATE - Thompson, 29 Nov 82 (1)
072 CABLE TV INTERFERENCE - Sirovy, 21 Dec 84 (3)
116 SATELLITE NEWS ANNUAL LISTING OF SERVICES - Jensen, 8 Oct 91 (8); 17 Nov 91 (3) [1990 list: 12 Sep 90 (8); 7 Oct 90 (3); 1989 list: 3 Jly 89 (8); 67 Aug 89 (3)]

TELEVISION NEWS COLUMN (Fahber)

17 — 041 TELEVISION HISTORY PACKAGE (17 pages)
The author ran, in seventeen installments, a "Retrospect" - good, brief history of the development of TV. Topics include: pre-FCC days, early experiments and DX, early equipment, development of standards, what happened to Channel 1, radioastronomy and Channel 37, the KLEE/KPRC bogus DX story, early repeaters, transmission from airplanes, etc. DATES: 6 Jan 82; 6 Feb 82; 4 Mar 82; 8 Apr 82; 6 May 82; 6 Jun 82; 6 Jly 82; 10 Dec 82; 9 Jan 83; 6 Apr 83; 4 May 83; 3 Jun 83; 5 Jly 83; 3 Aug 83; 50 Sep 83; 4 Nov 83; 19 Dec 83

TV TIME TUNNEL COLUMN (Bryant)

TV1 19 May 89 (1); 21 Jun 89 (1); 54 Jul 89 (1)
interesting stories of ND TV in the 1950's based on author's experiences
TV2 3 Aug 89 (1); 55 Sep 89 (1); 18 Oct 89 (1)
logos and QSL's from 1955-56
TV3 22 Nov 89 (1); 18 Dec 89 (1); 35 Jan 90 (1); 26 Feb 90 (1); 23 Mar 90 (1)
the history of TV development
TV4 36 Apr 90 (1)
a struggle to survive: the story of WMCV, WTLT, and WZTV
TV5 18 May 90 (1); 31 Jun 90 (1)
The Great Grocery Crash: stories of small-market TV in the 50's
TV6 55 Aug 90 (1); 65 Sep 90 (1)
early TV in Saskatchewan
8 — TV7 45 Nov 90 (1); 54 Dec 90 (2); 4 Jan 91 (5)
Fargo-11's mysterious origins; stations on air in '49 - with logos!
2 — TV8 36 Feb 91 (2)
historic TV test patterns
TV9 4 Mar 91 (2)
history of Seattle TV market
TV10 21 Apr 91 (1); 3 May 91 (1); 23 Jun 91 (1); 43 Jly 91 (1); 7 Oct 91 (1)
Odds and Ends - tidbits of TV history
TV11 55 Aug 91 (1)
basic info about skip propagation modes
2 — TV12 40 Sep 91 (2)
Whatever happened to channel 1?

RECEPTION REPORTS

7 — RR1 F2 TV DX RECEPTION REPORTS from Pat Dyer, San Antonio:
21 Jun 79 (1); 24 Jan 82 (1); 46 Mar 82 (1); 3 Apr 83 (1); 32 May 83 (1); 3 Jly 83 (1); 24 Sep 84 (1)
4 — RR2 SOUTH AMERICAN FM REC. REPORTS from A. Roccaforte, La Plata, ARGENTINA:
48 Sep 85 (1); 22 Feb 86 (2); 43 Aug 86 (1)
RR3 PIRATE RECEPTIONS
1. In "Mailbox" column, 3 Apr 85 (1)
2. In "Northern FM DX" column, 31 Nov 85; 27 Feb 86; 13 Aug 86 (3)

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TT2 8 Jly 79 (3)
Is M.S. possible on rabbit ears? Is M.S. seen on UHF? Lightning scatter. 300-ohm vs. 75-ohm lead in; using F connectors. Why RG-59 is poor for use at UHF. Good cable to use at PSB frequencies.

TT3 25 Sep 79 (1)
FM tuner specifications. Is it possible to hear 10W by E-skip?

TT4 44 Nov 79 (2)
Horiz. & Vertical polarization. Circular pol. What is E-skip?

TT5 28 Jan 80 (2)
What is a log-periodic antenna? What does "50dB quieting" mean? Problems with a UHF TV preamp. Specific-channel vs. broadband antennas.

TT6 25 Mar 80 (1)
Minimum height for a good antenna. How ant. height affects UHF & VHF.

TT7 34 Apr 80 (1)
Explanation of CCI patterns. TV offsets. Can 10kHz look like 20kHz CCI?

TT8 27 May 80 (2)
Simple, homemade indoor antenna (quad loop). Are preamps useful during E-skip openings? How to be warned of a potential opening.

TT9 26 Jun 80 (1)
Problems with interaction between antennas.

TT10 39 Aug 80 (1)
UHF antennas for DX'ing. Comparison of Finco P-5 and P-7 dishes.

TT11 50 Sep 80 (1)
All about S-meters. Can an FM antenna be used for TV? Preamps.

TT12 27 Oct 80 (1)
The Discone antenna. Can a UHF TV antenna be used for PSB?

TT13 13 Dec 80 (2)
Indoor UHF antennas for DX'ing. How to stack antennas.

TT14 6 Jan 81 (1)
Is it possible to have good mid-winter tropo DX?

TT15 34 Feb 81 (1)
Log vs. Yagi FM antennas. What is a "wedge" test pattern? Does tropo occur on the 30-50 MHz band? Likely times to look for Es.

TT16 24 Mar 81 (2)
Why preamps work best located at antenna. About UHF traps. Disadvantages of preamps. Losses from baluns and cables. Why nulls don't occur where they are expected.

TT17 23 May 81 (1)
The connection between E-skip and thunderstorms.

TT18 25 Jun 81 (1)
Are omnidirectional antennas useful? Discount antenna imitations.

TT19 34 Jly 81 (1)
Coax cable losses; general information about coax.

TT20 46 Aug 81 (1)
Info. about the Perseids meteor shower. When to look for M.S.

TT21 43 Sep 81 (1)
Picket-fencing and multipath effects on car FM radio reception.

TT22 23 Oct 81 (1)
The most common VHF TV antenna used by club members.

TT23 31 Jan 82 (1)
Are tuners or "receivers" the better DX performers?

TT24 30 Feb 82 (1)
Advantages of vertically mounting a TV antenna for DX'ing. How well a vertical antenna will work for PSB DX'ing.

TT25 45 Mar 82 (1)
How to best use UHF preamps and traps.

TT26 27 Apr 82 (1)
About auroral DX. What it looks like when seen on TV.

TT27 38 Jly 82 (1)
Best all-channel DX antenna. How height affects performance.

TT28 30 Nov 82 (2)
Information about coax and twin-lead; installation.

TT29 29 Dec 82 (1)
Where to locate and how to use a preamp for TV DX.

TT30 3 Feb 83 (1)
Comparison between the Finco FM-4G and FM-5 antennas.

TT31 27 Mar 83 (1)
Auroral DX tips.

TT1 THE WTFDA "DX'ERS ENCYCLOPEDIA" (36 pages)
The "Technical Topics" columns that ran before April, 1983, were written in a Q and A format, using questions actually sent by members to club HQ. They are not full articles, but brief discussions about specific topics of interest to DX'ers. This package, TT1, puts all of these columns (items TT2-TT31, as listed above) into one good reference.

TECHNICAL TOPICS (McVey)

Note: Technical Topics now appears as full articles on aperiodic basis.

2 — 074 21 Oct 84 (2)
Servicing antenna rotors.

4 — 077 40 Nov 84 (2); 20 Apr 85 (2)
All about selectivity: theory and applications.

082 22 Feb 85 (2); 29 Mar 85 (2)
Notes on building and installing a home-built SCA decoder.

2 — 083 32 Sep 85 (2)
NASA's Skylab ionospheric experiments.

1 — 084 19 Oct 85 (1)
All about FM broadcast pre- and de-emphasis.

085 31 Feb 86 (2)
Project: a home-built stereo headphone amp for tuners.

086 23 Mar 86 (5); 6 Jun 86 (4)
All about signal and tuning meters: theory, design, and application.

087 2 Aug 86 (3)
The use of polarization in broadcasting.

088 2 Sep 86 (3)
All about coaxial cable.

093 2 Feb 87 (5) THE NATURE OF DX, PART 1
Fundamentals of propagation of VHF/UHF signals through the troposphere.

098 30 Apr 87 (6) TNODX, PART 2
How tropo DX occurs and where; how to make predictions based on weather.

099 7 Nov 87 (5) TNODX, PART 3
All about path loss, signal fading, etc.

102 20 Feb 88 (3)
A discussion about overloading, spurs, intermods, birdies...

108 16 Jly 88 (3)
Spectral analysis of FM and TV bands and signals.

110 3 Nov 88 (3)
Technical news: what's going on with HDTV.

111 4 Mar 89 (4) TNODX, PART 4
Introduction to ionospheric layers and how they relate to DX.

117 4 Aug 89 (2)
Build a directional, quad-loop VHF antenna for indoor use.

122 5 Apr 90 (5); 18 Nov 90 (4)
All about tuner mods for improved selectivity; ceramic IF filters, etc.

131 3 Apr 91 (3)
Preamp basics; tests of the Winegard UT-2700 tunable UHF trap.

1 — 133 3 Jun 91 (1)
The mystery of backscatter.

As marked 45

ANTENNA NEWS Column (Dornbos)

AN1 13 Jun 83 (3)
(BIB. 1935-1945) Antennas and reflectors; theory. Antenna mounting.

AN2 25 Jly 83 (3)
(BIB. 1945-1947) Tripod as antenna mounts. When & how to buy DX gear.

AN3 35 Aug 83 (3)
(BIB. 1948-1952) All about antenna mast pipe.

AN4 4 Sep 83 (4)
(BIB. 1953-1956) All about towers.

AN5 19 Nov 83 (3)
(BIB. 1957-1960) All about antenna rotors.

AN6 15 Dec 83 (4)
(BIB. 1961-1963) Transmission line theory; balanced vs. unbalanced

AN7 16 Jan 84 (3)
(BIB. 1964-1968) Transmission line theory: impedance.

AN8 12 Feb 84 (3)
(BIB. 1968-1971) Transmission line hints & tricks; the 39¢ trap; baluns.

AN9 21 Mar 84 (4)
(BIB. 1971-1974) Coax cable product comparison; what to buy.

AN10 14 Apr 84 (2)
(BIB. 1974-1976) Traps and filters.

AN11 18 May 84 (4)
(BIB. 1977-1978) Preamps and preamp theory; noise figure.

AN12 14 Jun 84 (3)
(BIB. 1978-1980) Bandpass response of preamps; product comparisons.

AN13 40 Jly 84 (2)
(BIB. 1979-1982) Still more on preamps.

AN14 3 Aug 84 (4)
(BIB. 1983-1984) Consumer Electronics Show report; the decibel.

45 (4)

ANTENNA NEWS Column, Continued

AN15 13 Sep 84 (2)
Automobile and R.V. antennas.
AN16 32 Nov 84 (3)
All about automotive FM antennas: theory and practice.
AN17 8 Dec 84 (3)
List of addresses of antenna and hardware manufacturers.
AN18 28 Feb 85 (3)
Antennas for scanners: theory and practice.
AN19 28 Apr 85 (4)
All about indoor FM antennas; product comparisons.
AN20 22 Jun 85 (3)
All about outdoor FM antennas.
AN21 38 Sep 85 (4)
More on outdoor FM antennas. The Consumer Electronics Show.

NOTE: a complete bibliography covering almost every magazine article published from 1935 to 1984 on antennas or related topics, was supplied in several installments in the ANTENNA NEWS column. "BIB." indicates the years covered each month.

WHOOPS!

The following article should have appeared under EQUIPMENT REVIEWS:

132 THE ANTENNACRAFT FM-13 - Allen, 30 May 91 (4)

The VHF-UHF DIGEST TECHNICAL INDEX is now complete and updated from 1979 to 1992. (The first version of this index appeared in the Dec 86 VUD, pages 2-6.) There are just over 200 entries, covering every edition from June, 1979 to the present. Now, it is possible to locate information about 'most any topic of interest to DX'ers. (To conserve space, the categories on beer, football, and poker tricks have been omitted.) There has been some superb talent contributed to the WTFDA club over the past several years, and there's no reason for those efforts to go unrecognized or unused.

This index is organized by topic, with separate headings for the "Technical Topics" column of Bill Thompson, the "Antenna News" column of Doug Dornbos, the "TV Time Tunnel" column by Tom Bryant, and some of Bill Fahber's "Television News" columns. Every entry has its own reference number, title, author, page number, number of pages, and VUD edition. For example:

038 LOOPS, EARS, AND DX - Grant, 22 Dec 81 (1)

This article, written by Robert Grant, appears on page 22 of the December, 1981 VUD and is one page in length. Titles are in all capital letters, and quick descriptions are given when the title may not explicitly say what the article is about. I have made every effort to make this index complete and accurate, including a few corrections from the original index. It has been double-checked so that, hopefully, no articles have been overlooked or misprinted. I do welcome any comments or suggestions, or notice of any errors/omissions. Copies of this index are always available for free (with a large SASE) from me at the address below.

Any of the items in this index are available as reprints! This extremely popular service will be continued indefinitely. You may have noticed the three-digit number preceeding each entry. This number can be used to order reprints. In addition, it ranks the articles in chronological order.

TO ORDER REPRINTS...just order as you would from any mail-order catalog. Send me a note with the numbers of all the articles you want, plus ten cents per page. Use the number in parentheses to total up page count. Note that I need 10¢ per page, not per 2 pages as before. This is due to extra postage and copying costs; I do not make any profit doing this. I cannot cash checks payable to WTFDA.

Since starting this reprint service back in '87, I've sent out over 10,000 pages of material to over 100 requestors. At first, I was handling about one request every week; a couple of people even asked for a copy of everything! Every item has been requested at one time or another, reflecting the diverse interests of what many would see as a very narrow-interest club. Antenna articles are always the most popular, as well as equipment reviews, although many of these are becoming obsolete. I urge anyone out there with ideas for articles, pieces of gear or antennas that you are very happy/unhappy with, or new opinions about old topics, to write it down and share it with others. You could achieve immortality on the next index!

TIM McVEY (US address) PSC 45, BOX 1066, APO, AE 09468
(non-US address) 17 Park Gate, Knaresborough, HG5 9DR, England

$10.00 (100) — $14.50 (145)

QSL CORNER & LOGOS RUN

Thomas J. Yingling, Jr.
ARS: KA3TCC
221 Pinewood Road
Baltimore, MD 21222-2345

WI WDOR 93.9 Sturgeon Bay, Box 549, 800 S. th Ave., zip 54235. Received back my *PFC (prepared file card)* for qsl, signed by an Edward D. ????? (Ross)

FL WXTB 97.9 Clearwater, 2 Corp. Dr., Suite 550, zip 34622. PFC back in 3 weeks from P. Scott Miller, CE.(Ross)

KS KNGM 91.9 Emporia, Box 506, Zip 66801. Received PFC back in 4 weeks from Steve Pearson, GM. (Ross)

FL WEAT 104.3 West Palm Beach, 2406 S.Congress Ave., Zip 33406. PFC & QSL Card in 2 weeks from Bert Brown, CE. (Ross)

FL WHYI 100.7 Ft. Lauderdale, 2741 N. 29th Ave., Suite 300, Hollywood, FL Zip 33020. PRC & QSL Card from Howard Quinton, CE in 2 weeks. (Ross)

TX KYYK 98.3 Palestine, Box 649, Zip 649, Zip 75802. PFC & letter back in 1 month from Wayne Wilke, CE. (Ross)

KS KHCD 89.5 Salina, 815 N. Walnut, Suite 300, Hutchinson, FL Zip 67501. PFC in 1 month from Fred W. ???, CE. (Ross)

FL WQYK 99.5 St. Peterburg, 9450 Koger Blvd., Zip 33702. PFC in 2 weeks from Dr. Frank Henry ?, CE. (Ross)

MB CHIQ 94.3 Winnipeg, 1445 Pembina Hwy. Zip R3T-5C2. PRC in 1 month from an unreadable person. (Ross)

OK KMSI 88.1 Moore, Box 1924, Tulsa, OK 74101. PFC in 1 month from John R. McNay, Jr., Eng. (Ross)

FL WOZN 98.3 Key West, Box 1874, Tallahassee, FL Zip 32302. PFC in 1 month from Bob T. ????? (Ross)

GA WTUF 106.3 Boston, 117 Remington Ave., Box 3086, Thomasville, GA Zip 31799. PFC in 1 month from Jerry E. White. (Ross)

FL WWRM 107.3 St. Petersburg, 877 Executive Center Dr., Zip 33702. PFC in 1 month from David Solinse, CE in 1 month. (Ross)

AZ KAFF 92.9 Flagstaff, P. O. Box 1930, Zip 86002. Letter from Tim Garritt, Program Dir. who sent nice letter, coverage-map, market data bumper stickers, saying it's their first summer operating with full power of 100,000 watts, & that they have been heard in Alberta. (Elving)

CO KIQX 101.3 Durango, P. O. Box "X", Zip 81302. Letter from Bruce Anderson, Technical Manager sent very friendly letter, mentioning also dx from TX & FL as well regular reception across the Continintel Divide, but not able to get the signal into Delores, CO, "less than an hour's drive away." (Elving)

CO KBLJ 92.1 La Junta, P. O. Box 485, Zip 81050. Paul Coates, GM saying my report is the greatest distance they have heard from. (Elving)

CO KDHT 92.5 Greeley, 9351 Grant St., Thornton, CO Zip 80229. Letter from David W. Sawyer, CE sent a nice letter & bumper sticker, and wanting info on the current "FM Atlas" (Elving)

MT KGLT 91.9 Bozeman, 320 SUB/MSU, Zip 59717. Brief handwritten note at bottom or program guide by a person with an unreadable signature who says "Hope you can still us." (Elving)

MT KBOZ 93.7 Bozeman, P. O. Box 20, Zip 59715. Letter from John P. Brandt, Jr. VP/GM. Also send map & station coverage profile. They had heard from a listener in Norway not long ago (1090khz. AM dial). Other DX'ers take note: "We are always interested to hear from out listeners, especially those far way!"

Reporters: Robert S. Ross, VE3JFC; London, Ont & Bruce F. Elvings; Esko, MN. I hope this month column looks okay. I'm trying out Word for Windows on my IBM-PC. Still don't have the video frame grabber yet. I"m out again of QSL items again, but some Logos came in mail. 73's for now, see you down the log.

ORC ORGANIZACION RADIO CENTRO
ARTICULO 123 No. 90. DELEG. CUAUHTEMOC. 06050 MEXICO. D.F.
CONMUTADOR 510-48-60 CON 20 LINEAS
XEQR 1030 Radio Centro Cabina 512-75-17 y 512-75-52
VENTAS 510-14-83
CONTINUIDAD 521-91-75
NOTICIEROS 510-04-68
Fax; 512-85-88
XERC EXPRESION 790 Cabina 512-57-28 y 512-57-45
XEFAJ 15-60 Radio Consentida Cabina 510-33-17 y 510-28-70
XEJP ★★★ RADIO VARIEDADES CANAL 115 Cabina 510-47-05 y 510-47-06
Stereo 97.7 FM XERC Cabina 521-94-44
RADIO Alegría 14.40 Cabina 512-78-10 y 512-52-65
XEQR FM 107 RADIO UNIVERSAL Cabina 518-56-70
XECMQ 132 Radio Sensación Cabina 512-47-52 y 512-15-12
Radio JOYA XEJP FM 93.7 Cabina 518-20-33

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